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SCHOOL AND SOCIETY

EDITED BY J. McKEEN CATTELL

Volume XXVIII | SATURDAY, DECEMBER 15, 1928 | Number 729

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THE SCIENCE PRESS

LANCASTER, PA. GARRISON, N. Y.

GRAND CENTRAL TERMINAL, NEW YORK CITY

Entered as second-class matter August 15, 1923, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879

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EDUCATIONAL REVIEW

EDITED BY WILLIAM McANDREW

Volume XXVIII — SATURDAY, DECEMBER 15, 1928 — Number 729

STATISTICS OF REGISTRATION IN AMERICAN UNIVERSITIES AND COLLEGES, 1928

By Dean RAYMOND WALTERS

SWARTHMORE COLLEGE

AN advance of two per cent. in full-time students—the smallest annual increase since the war—is shown in reports just received from 216 colleges and universities of the United States and Canada which are on the approved list of the Association of American Universities. As compared with figures of a year ago, 115 institutions report increases and 101 report decreases. A tabulation as to size groups follows:

1928 AND 1927 GROUP COMPARISONS

Size of Group	No. Reporting Increases	No. Reporting Decreases
3,000 and up	27	18
1,000 to 3,000	34	22
500 to 1,000	30	31
Up to 500	24	30
TOTALS	115	101

An analysis by states shows that in twenty-six states there are more full-time students enrolled in approved colleges and universities of those states than in 1927, and in twenty-two states there are fewer such students. As to the causes of decrease in enrolment various explanations have been suggested, such as agricultural and industrial conditions, the development of junior colleges, a trend, in certain areas, away from the small colleges to the state universities, and deliberate limitation of enrolment. An institutional tabulation by states is given below.

Based on November 1 reckoning, the 1928 full-time enrolments of 216 institutions on this list total 417,526, which, compared with 1927 figures, is an increase of a little more than two per cent. The five-year increase of these institutions, 1922–1927, had totaled 25 per cent.

The figures in the next half dozen years must be awaited to determine whether a definite break has come in the rate of increase of collegiate enrolment. In this connection there is significance in facts as to the American birth-rate cited recently by Frank M. Phillips, chief of the division of statistics of the U. S. Bureau of Education. He pointed out that, applying the birth-rate and the infant mortality rate for each year, "22.5 children per thousand of the population reached the age of one year in 1916 and less than 20 per thousand in 1926." Restricted immigration likewise is a factor. If these conditions continue, both school enrolments and college enrolments will soon reach stationary periods.

ANALYSIS OF INSTITUTIONS BY STATES

State	No. of Increases	No. of Decreases	Enrolment 1928	Enrolment 1927
Ala.	1	2	3,617	4,280
Arizona	1	0	1,719	1,537
Ark.	1	0	1,615	1,420
Calif.	5	4	25,439	25,689
Col.	2	0	3,565	3,470
Conn.	0	4	6,419	6,471
Del.	0	1	690	698
D. C.	2	1	3,790	3,785
Fla.	2	0	3,713	3,411
Ga.	0	2	1,533	1,574
Hawaii	1	0	713	588
Idaho	1	0	1,786	1,778
Ill.	10	5	27,841	27,570
Ind.	5	4	13,834	13,421
Ia.	3	5	13,735	14,093
Kan.	2	2	5,091	5,119
Ky.	1	0	2,410	2,339
La.	0	1	2,351	2,359
Me.	3	1	3,193	3,149
Md.	1	2	5,069	5,404
Mass.	11	5	34,859	32,046
Mich.	1	2	11,720	10,471
Minn.	4	2	14,304	13,589
Miss.	1	0	1,109	1,072
Mo.	2	4	9,379	9,692
Mont.	1	0	1,410	1,313
Neb.	0	2	6,458	6,470
Nev.	0	1	812	823
N. H.	0	2	3,428	3,836
N. J.	2	2	6,071	6,671
N. Y.	17	6	66,203	62,563
N. C.	1	2	4,828	4,811
N. D.	1	0	1,579	1,573
Ohio	10	7	32,429	31,345
Okla.	0	1	4,604	4,738
Ore.	2	2	7,270	7,244
Pa.	9	9	28,476	30,195
R. I.	0	1	1,903	2,158
S. C.	1	2	3,707	3,848
S. D.	0	1	896	929
Tenn.	2	2	5,121	4,667
Tex.	1	2	7,262	7,103
Utah	1	1	3,667	3,761
Vt.	0	2	1,936	2,008
Va.	3	4	6,343	6,231
Wash.	0	2	7,830	7,910
W. Va.	0	1	2,449	2,504
Wis.	3	2	11,352	11,012
Wyo.	1	0	1,079	982

It may well be added that the present collegiate period, if it is a plateau, is nevertheless a plateau 25 per cent. higher than it was five years ago and very markedly higher proportionately than any similar popular level reached in other countries.

Table I gives figures in detail of universities which have been included for some years in statistical articles in *Science* and later in SCHOOL AND SOCIETY. Table III supplies a less detailed report upon students and teachers of additional institutions, with the aim of making the study broader. A few of the statistics for teachers and administrative staff are for 1927. The institutions asked to furnish statistics were those on the list approved by the Association of American Universities, as given in the association's most recent printed report.

Following the differentiation introduced in this series in 1920, Tables I, II and III are arranged to bring out clearly the enrolment of full-time and of part-time undergraduates. The full-time regular student is defined for this series as a student who has completed a four-year high-school course and is devoting his full time (twelve hours a week or more) to study during the collegiate year. The student whose main time and attention are given to some other employment and who takes college and university courses in late afternoon, evening and Saturday classes is listed as a part-time student. The grand total figures for 1928 include full-time regular students, part-time students and summer-school students of 1928 but do not include extension and correspondence students, who are, however, recorded in Table I.

The foregoing definitions of these terms, as used in the SCHOOL AND SOCIETY series, were endorsed by the American Association of Collegiate Registrars at its 1922 meet-

ing, and all the undergraduate enrolments are now reported on this basis.

Table II gives a list of the twenty-five largest institutions of those considered in this series.

The ten largest liberal arts colleges or departments are in the following institutions: University of California (including the division at Los Angeles), 9,783; Wisconsin, 6,121; Michigan, 5,519; New York University, 5,381; Minnesota, 4,654; College of the City of New York, 4,498; Illinois, 3,997; Texas, 3,424; Columbia, 3,381; Harvard, 3,233.

The enrolment of men undergraduates in the five largest liberal arts colleges or departments is as follows: College of the City of New York, 4,498; California, 4,091; New York University, 3,943; Wisconsin, 3,447; Michigan, 3,329.

As to women undergraduates, the size order of enrolment in coeducational universities for the five largest is as follows: California, 5,692; Wisconsin, 2,674; Michigan, 2,190; Illinois, 2,127; Minnesota, 1,912.

The ten largest exclusively women's colleges on the approved list are: Hunter, with 4,918 students; Smith, 2,022; Wellesley, 1,592; Florida State College for Women, 1,550; Vassar, 1,156; Mount Holyoke, 1,006; Goucher, 979; Radcliffe, 907; Randolph-Macon Woman's College, 795; Elmira, 588.

The five technical schools or departments reporting the largest engineering enrolments are: Massachusetts Institute of Technology, 2,868; Purdue, 2,366; Minnesota, 1,762; Illinois, 1,573; Ohio State, 1,548.

Among law schools the five largest on this list are: New York University, 1,785; Harvard, 1,589; Fordham, 1,465; Columbia, 638; Michigan, 557.

The five largest medical schools in the United States are: Michigan, 668; Minnesota, 636; Pennsylvania, 557; Harvard, 515; Chicago, 501.

The five largest non-professional graduate schools in American universities are as follows: Columbia, 2,497; California, 1,631; Chicago, 1,426; Minnesota, 1,024; Harvard, 908.

An increase in enrolment of agricultural students is general among the institutions on this list, which does not, however, include all of the leading schools of agriculture. Ohio State is first in numbers, having 793, or two more than Minnesota.

The five largest registrations of students in commerce and finance are reported as follows: Boston University, 3,683; Pennsylvania, 2,255; Ohio State, 1,827; Illinois, 1,822; New York University, 1,050.

Among dental schools, Pennsylvania has taken the numerical lead with 430 students. The six next largest are: Northwestern, 396; Michigan, 357; Pittsburgh, 340; Minnesota, 277; California and Columbia, each 250.

Teachers College of Columbia University has 4,681 students. Second in size is Teachers College, University of California at Los Angeles, where there are 2,009 students, to which 555 additional university students in education are added. Ohio State reports 1,716 students in education; Indiana has 1,479, and Minnesota has 1,446.

Chicago has the largest divinity school, with 298 students. The forestry school at Syracuse University, with 414 students, is largest in this field. The largest school of journalism is that of the University of Missouri, which reports 298 students. Among university schools of music, that of Northwestern leads with 265 students. The Columbia registration of 681 students is the largest pharmacy enrolment.

The extent to which the urban universities are making collegiate work available

TABLE I

	California	Chicago	Cincinnati	Columbia	Cornell	Harvard	Illinois	Indiana	Iowa	Johns Hopkins	Kansas	Michigan	Minnesota
College men	4091	1593	489	2298	1238	3233	1870	1430	1564	331	1312	3329	2742
College women	5692	1276	544	1083	663	...	2127	1037	1245	...	958	2190	1912
Engineering	1171	...	1519	207	1107	270	1573	...	329	287	556	1421	1762
Law	341	437	143	638	189	1589	436	118	225	...	143	557	270
Medicine	266	501	269	423	257	515	503	432	472	282	301	668	636
Non-Prof. Graduate	1631	1426	226	2497	602	908	895	248	283	354	238	953	1024
Agriculture	398	...	...	...	625	...	642	...	...	...	...	...	791
Architecture	...	...	...	95	190	80	254	...	...	...	...	312	...
Art	151	...	328	...	11	...	...	66	*	...	326	...	*
Commerce	899	240	*	382	...	868	1822	173	269	66	131	166	301
Dentistry	250	...	...	250	...	114	207	176	192	...	...	357	277
Divinity	...	298	...	...	...	110	...	...	...	...	...	...	...
Education	2564	66	594	4681	562	290	899	1479	...	...	120	793	1446
Forestry	65	...	...	...	100	18	...	...	...	...	...	30	*
Journalism	...	...	...	152	...	...	51	169	...	...	*	...	*
Music	48	...	...	...	...	...	125	92	109	...	*	...	*
Pharmacy	316	...	...	681	...	...	656	...	119	...	78	89	148
Other courses	401	142	185	433	616	115	103	188	354	92	...	242	665
Deduct duplicates	947	351	...	129	845	...	13	1441	114	...	125	153	159
Total	17337	5628	4297	13691	5315	8110	12150	4167	5047	1412	4038	10954	11815
Part-time	...	2523	4721	7058	...	...	...	66	705	3056	...	...	...
Summer session	10228	6338	1310	14007	2150	3149	2270	1984	3263	1107	1102	3486	6041
Deduct duplicates	1003	1827	...	2720	...	466	860	765	989	750	...	1550	...
Gd. tot., Nov. 1, '28	26562	12662	10328	32036	7465	10793	13010	5452	8026	5575	5140	12890	17856
Gd. tot., Nov. 1, '23	23139	12191	5710	28861	7090	8925	10557	5262	6701	3900	4561	11162	12322
Gd. tot., Nov. 1, '18	10471	7241	2731	9910	5783	4891	6096	3010	4116	1659	3916	...	5860
Exten. courses	14213	6510	1252	10706	...	1050	127	7171	1740	...	1550	..	6843
Teaching staff	957	765	433	2075	918	1244	1135	299	533	570	274	768	770
Administrative staff	60	75	18	71	13	197	71	31	118	13	6	73	10

* Included elsewhere.

for secondary school teachers and others who take late afternoon, evening or Saturday classes is shown in Table I under part-time enrolment.

The five largest summer schools for the 1928 summer session were: Columbia, 14,007; California, 10,228; Chicago, 6,338; Minnesota, 6,041; Wisconsin, 5,065. In general, summer-school attendance in 1928 showed no great increase over the 1927 figures.

The following paragraphs explain statistics presented in Table I and give additional information:

The University of California returns include the "University of California at Los Angeles," as it is now called, the designation Southern Branch being discontinued. There are 5,860 students at Los Angeles, of whom 3,832 are in the College of Letters and Science and 2,009 in the Teachers College. The teaching staff at Los Angeles comprises 220 persons. The 401 students listed in Table I under other courses are distributed as follows: Training School for Nurses, 160; agriculture non-degree, 230; dental hygienists, 11. The summer-school figures include 2,104 intersession students

TABLE I—(*Concluded*)

Missouri	Nebraska	Northwestern	Ohio State	Pennsylvania	Pittsburgh	Princeton	Stanford	Syracuse	Texas	Tulane	University of Washington	Virginia	Washington University	Western Reserve	Wisconsin	Yale
1134	1090	1188	1755	1389	1611	2051	2959	1012	1878	549	...	1135	693	753	3447	1630
586	771	1328	674	...	496	...	500	864	1546	438	...	7	744	714	2674	...
421	671	248	1548	138	493	175	219	346	1111	211	...	156	411	...	1080	669
146	162	321	297	484	275	...	204	140	349	97	...	284	182	289	341	318
75	307	521	330	557	261	...	177	182	284	436	...	240	300	245	291	208
164	343	330	844	157	859	228	366	166	167	122	...	163	226	48	959	614
274	549	...	793	...	...	...	...	66	...	...	...	8	...	...	555	...
...	...	...	...	327	...	...	...	...	...	68	...	...	111	...	...	100
112	460	...	...	36	...	...	16	706	•	156	...	60	137	...	...	149
187	652	414	1827	2255	774	...	68	953	226	153	...	138	183	...	224	...
...	92	396	245	430	340	...	...	...	...	...	...	...	195	174	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	217
371	1414	175	1716	761	731	...	99	115	95	•	...	101	...	389	•	63
...	...	...	...	...	...	...	...	414	...	...	...	1	...	...	...	39
298	177	70	•	...	...	...	37	•	•	•	...	...	...	...	119	...
...	•	265	•	30	...	...	...	•	...	42	...	119	...	...	157	115
...	112	...	188	...	433	...	...	...	75	23	...	...	...	114	81	...
...	102	301	254	147	22	...	...	457	67	193	...	...	262	630	115	1038
...	667	...	...	...	...	...	1186	233	4	137	...	326	40	...	1001	170
3067	6235	5557	10293	6711	6235	2454	3459	5188	5794	2351	7282	2086	3404	3356	9042	4990
274	249	5027	119	5862	3641	...	...	233	420	620	...	12	303	5493	...	753
1861	3320	2052	3504	2271	2798	139	1345	1679	3158	1133	3057	2792	948	1983	5065	87
474	907	600	1254	...	...	139	461	218	1113	...	...	579	297	...	1168	...
5328	8897	12036	12662	14844	12674	2454	4343	6882	8259	4104	10339	4311	4358	10832	12939	5830
4767	8220	8229	9725	14632	8553	2226	2778	5486	7511	3746	6627	4399	4774	4372	11088	4970
...	3955	5272	4888	4938	3402	1113	1864	3747	3785	2356	...	2140	1367	2654	5944	2554
3325	2485	...	...	2074	1087	...	...	829	3112	...	1781	470	10162	...	18261	...
284	360	615	883	1362	851	272	506	583	410	412	370	166	371	658	594	602
25	28	8	8	44	57	28	60	35	29	24	70	19	22	25	39	46

at Berkeley, 5,272 summer session at Berkeley and 3,658 summer session at Los Angeles.

At the University of Chicago there are increases over last year in the number of students in law, non-professional graduate courses and divinity, with decreases in medicine, business and education. Decreases exceed increases by ninety as compared with 1927. The figures 142 under other courses in Table I include 132 in social service administration and ten in the Graduate School of Library Science.

The University of Cincinnati report reveals an increase of 756 in the full-time enrolment and of 640 in the grand-total figures. Of the 328 students of applied arts listed under art in Table I, 193 are men and 135 are women. The 185 listed under other courses include ninety-eight in household administration and eighty-seven taking nursing and health courses.

Columbia's tremendous enrolment continues at substantially the 1927 height. With the addition of the Seth Low Junior College in Brooklyn and of St. Stephen's College at Annandale, the number of undergraduates is 13.5 per cent. greater than a year ago. The total of graduate non-professional and professional students is

TABLE II

University	Regular Students Full-Time	Rank	All Resident Students	Rank
California	17,337	1	26,562	3
Columbia	13,691	2	32,036	1
Illinois	12,150	3	13,010	7
Minnesota	11,815	4	17,856	5
Michigan	10,954	5	12,890	9
New York U.	10,711	6	26,303	4
Ohio State	10,293	7	12,662	11
Wisconsin	9,042	8	12,939	8
Boston U.	8,520	9	12,234	13
Harvard	8,110	10	10,793	16
U. of Wash.	7,282	11	10,339	17
Pennsylvania	6,711	12	14,844	6
Pittsburgh	6,235	13	12,674	10
Nebraska	6,235	14	8,897	19
Texas	5,794	15	8,259	20
Chicago	5,628	16	12,662	12
Northwestern	5,559	17	12,038	14
Cornell	5,315	18	7,465	23
Syracuse	5,188	19	6,882	24
Iowa	5,047	20	8,026	21
Yale	4,990	21	5,743	—
C. C. of N. Y.	4,929	22	28,287	2
Oklahoma	4,604	23	6,664	25
Cincinnati	4,297	24	10,328	18
Fordham	4,175	25	7,859	22
Western Reserve	3,356	—	10,832	15

twenty-two less than 1927—a decrease of .2 per cent. With the 1928 summer session registration of 14,007, with 7,058 part-time students and with 10,706 in university extension (7,519 home study, 2,336 extramural and 851 in special courses) the "super grand total" of all students receiving instruction of Columbia University is 42,742. This breaks all records at Columbia and elsewhere.

Forty fewer students than last year are indicated in the 1928 Cornell figures. There are no pronounced decreases in any departments. A supplementary statement shows a total of 1,299 women students at Cornell, of whom 663 are in the College of Arts and Sciences, 350 are taking home economics, 123 are doing non-professional graduate study and 89 are in agricultural courses. Under the term other courses in Table I are included 131 students in Cornell's new course in hotel management, 134 in veterinary work and 351 in home economics.

Due to an increase of 123 students in the Graduate School of Business Administration and to small increases in four other departments which offset decreases in four other departments, the Harvard figures for 1928 are somewhat higher than those for 1927. The full-time total is eighty larger. The grand total is eighty-one less, inasmuch as the 1928 summer school was smaller by 131 than that of 1927.

Slight decreases in the undergraduate enrolment at the University of Illinois are counterbalanced by increases in the professional and non-professional graduate schools, so that the total of full-time students is 117 larger than in 1927. The engineering figures in Table I include 1,219 in engineering, 222 in architectural engineering and 132 in chemical engineering. The 103 listed under other courses are students in library work.

With the single exception of dentistry, all departments of Indiana University report small increases over last year. The 1928 summer session was somewhat larger than that of 1927. In the extension enrolment of 7,171 there are included 769 correspondence students. The 188 listed under other courses in Table I are students taking nurse's training.

There are 354 students in nursing at the State University of Iowa who are included in Table I under other courses. Of the 705 part-time students recorded in this table, 382 are graduate students, 313 are liberal arts students and 10 are commerce students.

The full-time enrolment at Johns Hopkins is reported as 284 smaller and the grand total as 1,486 larger than in 1927. The latter is explained by the increase in

part-time students living in and around Baltimore, of whom there are 3,056. Under other courses in Table I are included 91 in the School of Hygiene and Public Health.

The 1928 attendance at the University of Kansas remains practically at the 1927 level, with a few more in full-time enrolment and a few less in the grand total. The 326 students listed in Table I under art "include students in fine arts and in music."

Registrar Ira M. Smith writes that there is a reduction in the number of students in residence at the University of Michigan for the current year, but that an increase of 664 extramural students produces a total increase. "All of our extramural students are taking work in regular academic subjects and no courses are offered by the home study or correspondence study method."

The University of Minnesota has 508 more students than a year ago. The law school reports a decrease of twenty-six; every other department reports gains. The 1928 summer session was 597 larger than that of 1927. In Table I the figures for engineering include 274 in chemistry and 118 in mines. Under other courses are embraced 614 in nursing and 51 in dental hygiene. The total for agriculture includes students in forestry and home economics.

Small decreases in most of the departments of the University of Missouri aggregate a decrease of 283 in the full-time enrolment, which is now 3,667. A gain of over 200 in the 1928 summer school brings the grand total up to nearly the 1927 figures.

Numerical increases in medicine, non-professional graduate, agriculture, journalism and pharmacy students at the University of Nebraska make up for decreases in seven other groups. The full-time enrolment is four less and the grand total enrolment is forty-four larger than in 1927. Students in music are included under the art figures in Table I. The 102 listed under other courses are students in nursing.

Northwestern University's report discloses a gain of 138 full-time students over 1927 and a gain of 738 in grand totals. The increases are due to small advances in most of the departments, with 528 more part-time students. The 301 persons listed under other courses in Table I are students in speech.

At Ohio State University, increases in liberal arts men, in medicine, in non-professional graduate enrolment, in agriculture, in commerce and in education bring the full-time registration to 10,293, or 258 more than in 1927. Students in journalism are included in the School of Commerce and Administration. The total for other courses in Table I is made up as follows: veterinary medicine, 110; arts-law, arts-medicine, science-medicine, etc., 83; school of nursing, 31; applied optics, 30. The 1928 summer session had nearly 500 students more than that of 1927.

Under its new policy of limiting attendance in certain schools, the University of Pennsylvania full-time enrolment is now 6,711, or 854 less than a year ago. The decrease is principally in the Wharton School of Finance and Commerce and in the liberal arts college. The engineering total in Table I includes 33 in chemistry and chemical engineering. Under other courses are embraced 85 students in veterinary medicine, 47 in biology and 15 in landscape architecture. Beyond the 157 men and women devoting full time to non-professional graduate study, there are 1,353 others doing part-time work. The College Courses for Teachers have 138 students, mostly young women, with 776 others listed as "partial students for certificates." In

TABLE III

Institution	Students Full-time	Students All residents	Teaching Staff
Agnes Scott	452	460	53
Albion	766	778	45
Alfred	494	588	39
Allegheny	614	698	40
Amherst	725	732	66
Baker	398	461	33
Bates	633	882	38
Beloit	473	479	43
Birmingham-South.	875	2,391	57
Boston C.	1,508	2,472	104
Boston U.	8,520	12,234	411
Brooklyn Poly.	444	597	42
Bowdoin	558	558	50
Brown	1,903	2,199	175
Bryn Mawr	484	484	86
Bucknell	1,090	1,348	...
California I. of T.	606	614	109
Carleton	793	805	68
Carnegie Tech.	2,450	3,358	286
Carthage	232	297	28
Case	640	682	69
Catholic U.	892	1,634	115
Central	676	950	41
Clark	324	541	38
Coe	809	929	68
Colby	623	627	35
Colgate	990	990	75
C. City of N. Y.	4,929	28,287	650
C. of New Rochelle.	732	762	48
C. of the Pacific	613	846	64
C. of St. Catherine.	415	540	40
C. of St. Elizabeth.	267	327	35
C. of St. Theresa	380	756	39
C. of Wooster	867	930	56
Colorado C.	575	613	63
Columbia	13,691	32,036	2,075
Conn. C. for W.	538	548	55
Converse	432	438	40
Cornell C. (Ia.)	504	538	47
Cornell	5,315	7,465	918
Dartmouth	2,273	2,273	231
Davidson	602	693	42
Denison	866	1,047	81
De Pauw	1,589	1,615	86
Dickinson	554	554	30
Doane	223	230	25
Dominican	185	348	56
Drake	1,311	2,183	96
Drury	441	461	34
Duke	1,722	3,044	107
Earlham	392	404	38
Elmira	588	588	51
Emory U.	1,081	1,705	227
Eureka	230	230	23
Fla. S. C. for W.	1,550	2,146	130
Fordham	4,175	7,859	212
Franklin	287	291	26
Franklin and M.	680	683	42
Georgetown U.	2,504	2,504	363
Gettysburg	642	830	47
Goucher	979	979	84
Grinnell	693	738	58
Hamilton	438	438	43
Hamline	378	378	44
Harvard	8,110	10,793	1,244
Haverford	295	295	36
Heidelberg	399	495	41
Hobart	307	307	35
Holy Cross C.	1,090	1,090	67
Howard C.	741	1,836	45
Hunter	4,918	6,202	608
Illinois College	418	418	25
Illinois Wesleyan	663	663	48
Ill. Women's C.	343	351	41
Indiana	4,167	5,452	299
Ia. State A. & M.	3,982	4,930	400
Johns Hopkins	1,412	5,575	570
Kenyon	262	264	27
Knox	598	598	41
Lafayette	1,076	1,076	90
Lake Forest	343	353	22
Lawrence	1,034	1,054	61
Lehigh	1,475	1,635	150
Macalester	523	484	39
Marietta	376	393	31
Mass. Ag. C.	885	1,015	100
Mass. Inst. Tech.	2,868	3,343	487
McGill	2,555	3,068	473
Miami U.	1,822	2,538	125
Middlebury	626	1,127	53
Mills	548	595	71
Milwaukee-Downer	383	400	45
Monmouth	474	696	37
Morningside C.	744	1,003	47
Mount Holyoke	1,006	1,028	108
Muhlenberg	440	1,398	31
New York U.	10,711	26,303	1,383
N. Y. State T. Coll.	1,149	1,803	70
North Central	517	572	40
Northwestern U.	5,557	12,036	615
Oberlin	1,614	1,717	161
Occidental	621	654	61
Ohio State	10,293	12,662	883
Ohio U.	2,084	2,177	200
Ohio Wesleyan	1,803	1,803	163
Oregon S. Agr.	3,433	4,172	268
Otterbein	380	382	32
Our Lady of the Lake	168	867	27

the School of Education there are 617 part-time candidates for degrees and 181 partial students for certificates. Extension students include 985 in accounts and finance and 1,089 listed as teachers. Counting all taught in University of Pennsylvania classes, the total is 15,741.

The grand total of the University of Pittsburgh is slightly above that of 1927. In the full-time figures there is a falling off, the decreases in four departments being larger than the increases in six departments. The 22 students listed under other courses in Table I are in retail training research. Counting 1,087 extension students, the number receiving instruction totals 13,761.

The Princeton figure of 2,454 includes an increase of 35 students in the engineering school of 175, an increase of 14 in the graduate school of 228, and an increase of 199 in the total enrolment of the university.

Stanford University continues to restrict its enrolment of women students to exactly 500, with freshmen chosen from a large number of candidates. The total of men students is forty-seven more than a year

TABLE III—(*Concluded*)

Institution	Students Full-time	Students All residents	Teaching Staff
Park	492	500	36
Penn. State	3,754	6,582	375
Pomona	764	1,102	72
Princeton	2,454	2,454	272
Purdue	3,765	4,221	303
Radcliffe	907	1,109	150
R'dolph-Macon M.	220	220	28
R'dolph-Macon W.	795	816	66
Redlands	542	575	43
Reed	326	343	30
Rensselaer Poly. I.	1,412	1,412	115
Rice Inst.	1,300	1,300	86
Ripon	420	464	26
Rockford	411	526	44
Rosary	275	557	30
Rose Poly.	257	257	22
Rutgers	2,875	3,955	256
Simmons	1,431	1,699	134
Simpson	645	742	41
Smith	2,022	2,022	227
Stanford	3,459	4,343	506
St. Lawrence U.	3,825	3,993	103
State U. of Iowa	5,047	8,026	533
Stevens Inst. of T.	475	489	43
Swarthmore	540	540	70
Sweet Briar	445	445	39
Syracuse	5,188	6,882	583
Trinity (Conn.)	270	276	34
Trinity (D. C.)	394	408	48
Tufts	2,037	2,037	400
Tulane	2,351	4,104	412
Union	823	913	76
Utah Agr. C.	1,006	1,496	73
U. S. Mil. Acad.	1,266	1,266	168
U. of Akron	1,026	1,589	78
U. of Alabama	3,001	4,617	136
U. of Arizona	1,719	2,270	165
U. of Arkansas	1,615	2,375	150
U. of Buffalo	1,420	3,206	383
U. of California	17,337	26,562	1,387
U. of Chattanooga	348	387	23
U. of Chicago	5,628	12,662	765
U. of Cincinnati	4,297	10,328	433
U. of Colorado	2,990	6,426	276
U. of Delaware	690	988	73
U. of Florida	2,163	3,853	194
U. of Hawaii	713	1,167	69
U. of Idaho	1,786	2,410	148
U. of Illinois	12,150	13,010	1,135
U. of Kansas	4,038	5,140	274
U. of Kentucky	2,410	3,318	230
U. of Maine	1,379	1,652	135
U. of Maryland	2,678	3,681	450
U. of Michigan	10,954	12,890	768
U. of Minnesota	11,815	17,856	770
U. of Mississippi	1,109	1,431	55
U. of Missouri	3,667	5,328	284
U. of Montana	1,410	1,850	97
U. of Nebraska	6,235	8,897	360
U. of N. Hampshire.	1,155	1,495	124
U. of Nevada	812	942	68
U. of N. Carolina	2,504	4,221	210
U. of N. Dakota	1,579	1,868	116
U. of Notre Dame	2,975	3,737	160
U. of Oklahoma	4,604	6,664	270
U. of Oregon	3,019	4,307	283
U. of Penna.	6,711	14,844	1,362
U. of Pittsburgh	6,235	12,674	851
U. of Richmond	542	650	...
U. of Rochester	995	3,311	105
U. of the South	323	337	35
U. of S. Carolina	1,513	2,088	88
U. of S. Dakota	896	1,195	92
U. of Tennessee	3,064	4,487	328
U. of Texas	5,794	8,259	410
U. of Utah	2,661	3,420	179
U. of Vermont	1,310	2,222	198
U. of Virginia	2,086	4,311	166
U. of Washington	7,282	10,339	370
U. of Wisconsin	9,042	12,939	594
U. of Wyoming	1,079	2,020	95
Vanderbilt	1,385	1,385	223
Vassar	1,156	1,244	143
Wabash	402	402	29
Washburn	655	947	69
Wash. & Jefferson.	500	742	41
Washington & Lee.	910	910	58
Washington U.	3,404	4,358	371
Wellesley	1,592	1,597	164
Wells	237	237	37
Wesleyan	621	621	56
Westminster (Mo.)	283	283	17
West Virginia	2,449	3,251	...
West. C. Women	397	397	32
Western Reserve	3,356	10,832	658
Westminster (Pa.).	492	528	29
Wheaton	450	450	46
Whitman	548	548	40
Willamette U.	491	575	...
William & Mary	1,345	2,145	68
William Jewell	416	420	19
Williams	807	807	75
Wilson	444	454	41
Winthrop	1,762	3,337	103
Wittenberg	1,081	1,960	88
Worcester Poly.	575	601	67
Yale	4,990	5,743	602
TOTALS	417,526	650,951	...

ago. In education there is an increase of twenty-three students.

Larger enrolments in every department except law bring the full-time total at Syracuse to 5,188, or 176 more than on November 1, 1927. The 1927 summer school had 234 students more than in 1926, its registration being 1,679.

An increase of 258 over the 1927 full-time enrolment is shown in the report of the University of Texas. There are small gains in nearly all departments. The 1928 summer session was slightly under the 1927 attendance. In Table I the engineering figures include 676 students in engineering and 435 in mines. The 67 students noted under other courses are taking nursing. A supplementary statement discloses that 1,810 students are taking education courses of the university.

Departmental increases and decreases at the Tulane University of Louisiana are about equal for the full-time enrolment. Due to a larger summer school (a gain of about 100), the grand total registration is higher for 1928 than for 1927. Of the 211

listed as engineering in Table I, 44 are chemistry students. Beyond the 436 medical students indicated in the table there are 178 registered in the Graduate School of Medicine, primarily physicians taking review courses.

The report from Seattle shows that the 1928 full-time enrolment of the University of Washington is 7,282, as compared with 7,354 on November 1, 1927; and 10,339 for grand total enrolment, compared with 10,603 a year ago. There are 1,781 extension students, or 381 more than last year. Detailed statistics were not received in time for printing in Table I.

A somewhat larger summer session, 2,792 students, accounts for the grand total gain at the University of Virginia over the 1927 figure. In the full-time classification there is a decrease of forty-nine, due chiefly to a lessened engineering attendance.

The 1928 registration of Washington University remains practically at the 1927 level for full-time students (20 higher), and the grand total is 104 larger than that of a year ago. The 262 students noted under other courses are in nurse's training.

Outstanding in the report of Western Reserve University is the enrolment of 389 students in education, which is 230 more than last year. There were general departmental increases bringing the full-time total to 3,356, or 433 higher than last year —a 14 per cent. gain. Under other courses in Table I are included 207 students in the School of Applied Social Sciences, 184 who take nursing, 158 in the Cleveland College and 81 taking library science.

Somewhat lower figures at Wisconsin for men and women in liberal arts are met by higher registrations in law, medicine, non-professional graduate and commerce courses. The present full-time enrolment of 9,042 is precisely 100 more than last year. The total of 115 students under other courses is made up of 74 in graduate nursing and 41 in library work. The "super-grand total" of all students receiving instruction under the university's auspices is 31,200.

Every state and territory and some thirty foreign countries are represented in the student body of 4,990 at Yale. The figures under other courses in Table I include 890 students in the freshman year who will later enter either Yale College or Sheffield Scientific School, 78 taking the course in drama and 70 who take the course in nursing. The 602 listed in the teaching staff include 144 part-time teachers.

The statistics in Table II afford opportunities for comparing attendance in colleges and universities of similar character.

POSSIBILITIES OF VOCATIONAL EDUCATION

By K. E. EVANS

"To know what ought to be known," wrote a Japanese sage, "and to do what ought to be done, that is enough. There is no time for anything else."

Obviously, the statement does not get us very far. The question, "Just what ought to be known or done?" still faces us. Nor would most of us fully endorse its seeming ban on recreation both mental and physical—unless, of course, its author would grant freely that one "ought to take recreation." None the less, the statement does give emphasis to the truth that some things, some tasks, some studies are more essential than other tasks and studies, some fields of learning more important, some activities more vital, and that a sound education is acquired, not just by collecting miscellaneous information, but by becoming acquainted with those realms of knowledge which surround our daily life and labors. "Why did you take that

course in athletic psychology?" a father asked of a student in a western university. "Because, Dad, I needed just two credits more to graduate in mid-year." Possibly in this case the selection was justified. Yet, needless to say, a degree picked up in this fashion, two credits here, four there, without regard to the relative value and personal utility of the courses, would not prove one a well-educated man. Indeed, despite Ludwig Lewisohn's strictures in "Up-stream," the young fellows who went to Ohio State to learn how to become better undertakers and accountants were perhaps more truly educated than was Horace Walpole's famous uncle, who "knew a little of everything except how to hold his tongue and how to apply his knowledge."

And this the more because it is increasingly difficult to know even a little of almost everything. Three, perhaps two, generations ago that was relatively possible. A real all-around education was not a mere polite figure of speech. Since then, however, not only have many new fields of knowledge been opened, but it has become harder and harder to keep up with the fresh and frequently revolutionary discoveries made in old and new fields alike. Even history, where once a few courses in college plus a first-class memory sufficed, is no longer an exception. Has not the history of the World War, indeed, already been rewritten several times? With this tremendous increase of possible knowledge some narrowing of each man's domain becomes inevitable. Despite, or thanks to the encyclopaedias, specialization is in order. One must major willy-nilly in some things and not even minor in others. But major in what, select his studies on what principle? In our American universities the answer is found more and more in the student's future profession or avocation. The young man plans to become a lawyer or an engineer, and his courses are arranged accordingly. But what of the great mass who never reach the university, never get beyond the high school, if indeed, even through it? Granting that there are certain common studies indispensable to every one, simple English, for example, and elementary arithmetic, and some acquaintance with American history, still, in our secondary schools, should not the pupil's curriculum be equally governed or shaped by, or perhaps centered around, the work he will probably do when he goes out into the world?

To this an increasing number are answering, if somewhat hesitantly, "Yes." Despite the protests and laments of both classicists and theoretical democrats, vocational courses indeed (the commercial, the domestic science course) are no longer a novelty in our high schools, while industrial and vocational schools have arisen in our larger cities. Unfortunately, however, these vocational schools are still too often regarded as poor relatives of the others—which some of them are—as finishing schools for the stupid, detention camps for the mischievous. Nor have educators as yet fully realized the possibilities of vocational education. It has been too largely a substitute for a training supposedly better; has lacked unity of purpose; has, in practice, meant the elimination of some subjects rather than the regrouping of studies around some new center of interest. We have grown so used to fitting or attempting to fit the pupils into our conventional curriculum that we can not quite make up our minds to reorganize our curriculum to fit the needs of future bricklayers or carpenters.

And of course there are practical difficulties in the way. For one thing—who are to be the future carpenters? At nineteen or twenty the average young man has often a hazy idea of what he wants to be or do. His special capacities, his dominant interests have developed. At fourteen or fifteen, however, this is not so often the case. Indeed, many a boy, then, is less sure of himself and his goal than he was five years earlier, when to be an aviator or perhaps a policeman was his pet ambition. Yet some boys at fifteen do show a definite trend; others, it is reasonably certain, could be easily guided in some definite direction, instead of being left to wander aimlessly along, at last, untrained, to stumble into the wrong job. If only, in dawning adolescence, their personal interest be aroused, the human possibilities and social utility of some occupation shown them, their lives and future labors taken as seriously as their Latin, and carpentry made as attractive as chemistry. "But this is unfair to the boy who, left to himself might eventually become a—Congressman." Is it? He can still run for Congress later on if

he wishes to or sell cabbages or vacuum cleaners. While, if one says solemnly—"This is not the task for the educator; education means the training of the mind"—the reply is obvious. Assuredly the mind does not develop in a vacuum. It is the mind of John Smith in a living world. Why not link his mental training with some form of activity that will help him to earn his living?

And this the more since, whatever the vocation—carpentry, house-painting, tool-making—John's thorough preparation for it is no holiday task, but a job for a life-sized teacher. Here, indeed, some college-bred educators fail to sense the facts. They think of the crafts as just hand-crafts and nothing more, of vocational education in such cases as just manual training plus, of course, some arithmetic, English and civics. The truth is, in the words of a high official in a large western factory, "We have no mere hand-workers in our plant. The men in the shops work just as much with their heads as the men in the office." He might have put it even more strongly. To be a first-class mechanic very possibly requires greater intelligence than to be a first-class stenographer; while to master thoroughly the technique of cloth-making or steel construction would tax the brain of many a dentist or lawyer. That some men get by in these trades without overmuch intelligence or knowledge does not invalidate this statement. So, too, some get by in dentistry or at their bar examinations. Did not a Wisconsin school superintendent assert that he knew of a high-grade moron who was a teacher in his own city schools? Granted that many of our craftsmen—the painters and paperhangers, for instance, are inadequately trained—this but emphasizes the need of a better, fuller industrial or vocational education begun in our secondary or elementary schools under the leadership of men and women who realize that the house-painter, no less than the portrait painter, must mix his paint "with brains."

So much for the technical side where mathematics and physics and chemistry have often their share in or their bearing on a full training for this craft or that. Yet this is not all. Would the average boy take more interest in geometry were its problems worked out less on the blackboard than on the carpenter's bench or in the pasture? Would the laws of physics be more easily remembered if he had to apply them in the shop—perhaps learned them there? But almost equally economics forms naturally a part of his industrial curriculum. It is important for him to know how his craft fits into the industrial life of the world, how his product will be valued and his wages determined. To understand this more fully he needs the aid of history, and to appreciate the significance of his craft more fully he needs the help of literature and art as well.

In other words, a complete vocational education, thorough and well rounded, is by no means a narrow one. The craft, the industry forms a base for it, a core, if you please, or a starting-point. It does not wall it in nor set a limit. "How much may it include?" That depends, no doubt, on the pupil. Enough here that the so-called culture studies have naturally some part in it. Only now they are approached from a new angle, seen in a new light, and because of that fact may often awaken far more interest than they did before. Take history, for example. The story of every trade is woven into the history of the world. Nor less does the history of the world have its influence on the development of every trade. "Why did the masons build castles nine centuries ago? But five centuries later rear chateaux instead? And now erect factory chimneys?"—Go find the full answers to those questions, my young builder, you have grasped not a little of the history of civilization. Or again—"Why does the Lord Chancellor of England sit upon a wool-sack, my youthful farmer or weaver?" Ah, if you are to know your business thoroughly you must learn that it includes not only raising sheep and weaving cloth but also raising kings and weaving empires.

So, too, with literature as it reflects the varied life of man—its poetry, its drama, its fiction have special messages for those of every calling. Indeed, even Latin literature, probably in translations, might have some interest for the embryo craftsman. Ordinarily a boy finds it dull. After straggling along behind Caesar's weary legions and dozing beneath Cicero's eloquence, he has no heart to put to sea with Vergil. But

what occurs when there are no "college requirements" to be satisfied? In the opening chapter of "The Real Log Cabin" Chilson Aldrich tells his own experience. He had become completely disgusted with Latin until one rare day he ran across a gentleman named Horace who actually found pleasure in the life of the farm and the fields. Perhaps there are others like Aldrich who would not find Latin literature or even the Latin text so wearisome, if only they were introduced to authors who were not trying, it would seem, to write texts for the grammarians, but to picture the common life of their time made uncommon by their pens. Be this as it may, however, the literature of Europe, of England, of America with her Whitman, offers the future craftsman no meager fare. So much there is in each that recalls the great yesterdays of his chosen art, revives its traditions! So much that may kindle his fresh enthusiasm! So much that can clothe his coming task with beauty and with meaning! Can its master-artists do more than that—stimulate his mind, develop his powers of self-expression, widen his vision of life, help him to sense how the whole universe presses around the workshop and the farm. One sets no limits to their powers, but first of all, wisely selected, they can help him, dramatists and poets and story tellers, to find himself in his work.

Is this aiming too high, expecting too much of a vocational course? No doubt in the schoolroom, as elsewhere, the response will vary, and some boys and girls will get more, and some less. Suffice it to show that, though based on a special trade or group of trades, a vocational educational need not therefore be, should not be either narrow or deadening. It can reach out into the world and up. Science and history and literature can have a part in it; art can lend its inspiration. Without lessening the technical demands, each coming craftsman can be helped to realize that his craft has a culture of its own, and withal a share in the larger life and thought of civilization which he can cultivate if he will.

But helped by whom? Will it take a rare breed of teachers gifted of hand as well as of brain, of brain as well as of hand, and with a spirit that enlightens both? Ay, must we reorganize our Normal Schools to train more of such teachers, have schools such as William Morris might have founded?

If so, let us have them soon.

EDUCATIONAL EVENTS

THE ELECTION OF AMERICAN RHODES SCHOLARS

THE results of the annual election of American Rhodes scholars are announced by Dr. Frank Aydelotte, president of Swarthmore College and American secretary to the Rhodes trustees. Elections were held in thirty-two states of the Union. In order to qualify, the Rhodes scholar must either be a resident of the state or have received at least two years of his college education in one of the colleges in that state.

Rhodes scholars are appointed in the first instance for two years, with the option of remaining for a third year, and with an annual stipend of £400 (about $2,000). Nearly all the scholars-elect hold American university degrees and some have already begun post-graduate work. The choice is based upon intellectual attainments, combined with qualities of character and leadership and interest in outdoor sports.

The present year marks the beginning of a new basis of tenure for the Rhodes scholarships. Rhodes scholars were formerly appointed for three years, but because of the fact that it is now possible for an American graduate to take a degree at Oxford in two years, the Rhodes trustees have authorized appointments for only two years in the first instance, with a possibility of each scholar remaining for a third year, providing his record justifies it, and providing he presents a satisfactory plan of study. Still further changes in the regulation of Rhodes scholarships are contemplated in a bill which has been introduced in the present session of the British Parliament. This bill, if passed, will make it possible to carry out a proposal made some years ago by the American Rhodes scholars and endorsed by the leading educational authorities in the United States, changing the basis of appointments from states to districts.

The Rhodes scholars just elected will begin their work at Oxford in October, 1929. For the thirty-two scholarships open this year there were 398 candidates. Each candidate had previously been selected to represent his college or university in the competition. The list of Rhodes scholars-elect, subject to confirmation by the Rhodes trustees with the institution from which accredited, is as follows:

Arizona—Edwin R. Casady, Jr., Cornell.
Connecticut—George T. Washington, Yale.
Delaware—Richard K. Irons, Worcester Polytechnic.
Florida—Albert A. Murphree, Florida.
Idaho—Farnsworth Jennings, Idaho.
Illinois—Robert Z. Hickman, Illinois.
Indiana—Richmond Lattimore, Dartmouth.
Kentucky—Aubrey M. Cates, Louisville.
Louisiana—Cleanth Brooks, Jr., Tulane.
Maine—Dana Merrill Swan, Bowdoin.
Maryland—Manasses Jacob Grove, Yale.
Massachusetts—Malcolm A. MacIntyre, Yale.
Montana—Matt Pakala, Montana State.
Nevada—Frederick M. Anderson, Nevada.
New Hampshire—Carl Bernhardt Spaeth, Dartmouth.
New Jersey—William Winters McQuilkin, Princeton.
New Mexico—Richard D. Mallery, New York Univ.
New York—George A. Lincoln, U. S. Mil. Acad.
North Carolina—Daniel E. Huggins, Jr., North Carolina.
North Dakota—Frederick L. Hovde, Minnesota.
Ohio—Royal C. Bryant, Western Reserve.
Oklahoma—Savoie Lottinville, Oklahoma.
Pennsylvania—R. Max Goepp, Jr., Lehigh.
Rhode Island—Albert Cornsweet, Brown.
South Carolina—Robert Emmett Houston, Jr., Yale.
South Dakota—John King Fairbank, Harvard.
Tennessee—Robert Earle McGee, Southwestern.
Utah—Paul D. Schettler, Univ. of Utah.
Vermont—Charles F. Malam, Middlebury.
Virginia—Armistead Lloyd Boothe, Virginia.
West Virginia—S. Roger Tyler, Jr., Marshall.
Wyoming—Robert E. Burns, Wyoming.

WORK OF THE BUREAU OF EDUCATION

The Secretary of the Interior, in his annual report, calls attention to the outline made by the Bureau of Education of what it terms "important movements in the field of education," and its summary of the operations of the bureau. Educational surveys constitute an important function of the Bureau of Education. Two of these are cited.

In March, 1927, the bureau undertook a resurvey of Negro colleges and universities in the United States. The report has been completed and is now in process of publication. The survey shows the remarkable gains made in the development of institutions of higher learning for Negroes in the past ten years, and the need for ever greater development of colleges and universities, that the needs of the race may be fully met.

The work of the survey of the land-grant colleges was begun in July, 1927, when the funds appropriated by Congress became available. Rapid progress has been made. Large numbers of persons are actively participating in this survey as members of local committees and of the field staff. Many of the questionnaires have been prepared and distributed to the colleges for final filling out. The bureau's field staffs to handle four of the questionnaires have been organized and their members have commenced to make visits to the institutions.

The bureau emphasizes the increasing need of research in the field of education on a comprehensive basis such as no other agency aside from the Bureau of Education is in a position to perform. Perhaps this purpose may be served, it holds, by the organization of a number of successive studies national in scope, with definite objectives and limited in time, for which specific appropriations may be asked. It has in mind a series of studies similar to the survey of the land-grant colleges and universities, which is now in progress.

The Bureau of Education has asked for $50,000 to begin a study of secondary education, to be followed in successive years by appropriations of $75,000 and $100,000, respectively. This, it holds, would be a small outlay for a comprehensive study in the field of secondary education, with a view to bringing about some order in this chaotic section of education. The National Education Association and numerous regional associations have passed resolutions that such a study be made.

The Bureau of Indian Affairs has asked the Bureau of Education to make a study of Indian schools and to suggest methods for their im-

provement. This study has been approved by the Secretary of the Interior, and a preliminary visit made to a number of Indian schools with a view to setting up this investigation. Using the report of the Institute for Government Research as a basis, a very valuable service can now be rendered through the Bureau of Education to the Indian schools.

The state superintendents of public instruction and commissioners of education have decided to hold a two-day conference in Washington in December with the Federal Commissioner of Education. One of the problems which they propose to discuss is the support and financing of schools. In view of the fact that the costs of public schools have more than doubled in the last few years, it seems that such a study would be highly serviceable to the cause of education; measures might be formulated in the interest of economy that would prove most efficacious.

This whole field is relatively unexplored. Every conceivable form of taxation is used in the effort to support schools. No one has attempted to show the most satisfactory ways of raising funds for school purposes. A sound and economic program for expenditures is equally as important as a proper system of revenue. These and other studies, the bureau believes, ought to be made as quickly as funds are available.

THE CASE METHOD OF LEGAL EDUCATION

THE case method of legal education, developed at Harvard Law School and subsequently adopted by the leading schools of the country, has been found unsuited to the demands of modern life, according to a statement made by Dean Young B. Smith, of Columbia Law School, in his annual report. It will be abolished at Columbia.

Law has developed so fast during recent years and the field has become so vast and complex that the case method is no longer adequate. The new method which will be worked out gradually will begin with the proposition that law is a form of social control, and from there seek to enunciate the basic principles, the "energizing forces," behind the laws themselves.

The new policy, which Dean Smith warns must be developed through a slow and arduous readjustment, had its beginnings in the 1923 report of Supreme Court Justice Stone, then dean of the Columbia Law School. The matter has been the object of study since then, and at present certain changes in courses which are regarded as the beginning of the actual change to the new policy actually have been put into effect.

In enunciating the new aims, Dean Smith's report says:

> For a number of years after the inauguration of the case method law teachers were so engrossed in preparing case books and perfecting the technique of this pedagogical device that, except for a limited amount of research in legal history, little thought was given to other aspects of legal education.
>
> During this same period the law was expanding rapidly in every direction to meet the exigencies of modern life. In time its content became so enormous and complicated that it became impossible for any one man to master the intricacies of common law doctrine, to say nothing of legislation, except within very limited areas.
>
> In their efforts to keep abreast with the courts, legal scholars tended to become specialists in the legal doctrine which had developed in particular fields, without first acquiring an adequate knowledge of the changes in the social structure which had caused the expansion of the law.
>
> Undue emphasis was placed upon the rules of law developed by the cases, and too little consideration was given to the economic, political and other social problems which had brought the rules into being. As a result there was a tendency to disregard the relationship of one branch of the law to another and to lose sight of the function of law in society.

REPORT OF THE COMPTROLLER OF CORNELL UNIVERSITY

THE annual report of the comptroller of Cornell University for the fiscal year ending June 30 shows that the cost of conducting the endowed colleges at Ithaca during the year exceeded the available income by $12,896.70, thereby increasing the accumulated deficit, which was $411,545.63, to $424,442.33. To apply on this deficit the trustees appropriated $98,241.60 from profits received on securities sold during the year, thus reducing the deficit to $326,200.73. Of this deficit approximately $136,000 resulted from the purchase of land bordering on the campus and needed by the

university to supplement or protect its existing holdings; $78,000 was for the equipment of new buildings, and the balance of about $112,000 came from ordinary running expenses. In addition there are being carried in a special account the Franklin C. Cornell property, $200,000; the Bool Mill at Forest Home, $9,000; additions to the Women's Residential Halls site, $64,974.18, and land in Fall Creek for future water-power developments, $75,170.20. This brings the total indebtedness of the university up to $675,345.11.

In the Medical College in New York the cash deficit for the year was $51,951.52, which increased the accumulated deficit to $263,444.90. This was reduced by the receipt of $85,000 from the estate of the late Payne Whitney and of $67,531 transferred from the Medical Increment Fund, thus reducing the accumulated deficit to $110,913.90.

The year's work in the Veterinary College showed a deficit of $1,509.54. But there was a surplus a year ago of $17,438.51, which offsets this and leaves a balance of $14,928.97.

Likewise the deficit of $12,671.28 in the College of Agriculture is met by the surplus of $56,949.45, which leaves a balance of $26,298.25.

The College of Home Economics showed a surplus of $4,937.54, which added to the previous surplus swells it to $21,989.82.

The Geneva Experiment Station showed a deficit of $888.66, which is met by a surplus of $2,023.38, making a balance of $1,134.72.

The income-bearing funds were increased during the year by about $500,000 to $19,909,108.38, of which $15,472,931.59 is for the benefit of the University at Ithaca and $4,436,176.79 is for the Medical College in New York. The average return on investments was 5.459 per cent. The market value of the securities held on April 1 exceeded the book value by over $1,100,000. During the year the university realized somewhat over $335,000 of profits from the sale of securities.

The Semi-Centennial Endowment Fund campaign netted subscriptions amounting to $6,652,044.43. From this amount there has been charged off as uncollectible $187,776.26. Of the amount remaining, $6,464,268.17, $2,427,390 is still unpaid.

Gifts received during the year and recorded in the comptroller's office amounted to $4,043,559.05.

Through the Cornellian Council there was received during the year $532,008.25. The total amount paid in through the Cornellian Council since 1913, inclusive, is $2,059,098.81.

The total income was $8,973,318; the total expenses were $7,262,171.99. The total value of the property has increased by $2,913,619.19 and now amounts to $37,783,515.33.

REPORT OF THE PRESIDENT OF THE CARNEGIE FOUNDATION

NEW grants of $2,000,000 and payments on previous grants totaling $4,000,000 were made by the Carnegie Corporation during the fiscal year ended September 30, according to the annual report of the president, Dr. Frederick P. Keppel.

The Carnegie Endowment for International Peace received $150,000 for its program in the United States. The Institute of International Education, used by foreign students studying in the United States and Americans studying abroad, also received a large grant.

One third of the total sum voted was given for the support of educational studies, scientific research and publications, the president's report shows. The California Institute of Technology received $200,000 for research in physics and chemistry conducted by Professor R. A. Millikan. The President's Conference on Unemployment received $75,000 for a study of economic changes by the National Bureau of Economic Research. The Carnegie Foundation for the Advancement of Teaching received the sum of $50,000 for the study of education in Pennsylvania.

Amounts ranging from $5,000 to $50,000 were given for studies in land economics, pyorrhea, economics of medicine, non-college technical education, cooperative education in Africa and traveling fellowships.

Adult education was emphasized, $102,000 going for this purpose. Library schools were given $140,000. Grants totaling $110,000 were made to the American Federation of Arts for administrative development over a five-year period. Art endowment grants of $50,000 each were made to Milwaukee-Downer College, the

University of Rochester, Vassar College and Wesleyan University.

Mr. Keppel's report gives particular attention to the uses made of the income of a fund of $10,000,000 for study in Canada and the British colonies. From this source the corporation embarked on a five-year program in British Africa. Responsible organizations in Africa are to administer funds for the selection and oversight of scientific research, including a major scientific research in what is known in South Africa as the "Poor White" problem; assistance was given to the fine arts departments of Natal Technical College, the University of Witwatersrand and the University of Cape Town; publication of a work on Bushmen cave paintings was provided for, and an exchange of African leaders arranged. Funds were voted for additional support of the Jeanes Schools, which represent the adaptation of the fruits of our American experience with the southern Negroes to the education of the native African. Two librarians of international reputation, Mr. S. A. Pitt, of the Mitchell Library, Glasgow, Scotland, and Milton J. Ferguson, state librarian of California, were sent to Africa to make a special study of library conditions and opportunities. Also, during the year, Dean Emeritus James E. Russell was sent to Australia and New Zealand as well as to South Africa in behalf of the corporation to make a study of educational opportunities.

The report of Mr. Keppel includes statements of progress of large enterprises supported by corporation grants made in previous years, such as the Institute of Economics, Food Research Institute, the American Law Institute and the Graduate Library School of the University of Chicago.

THE COMMITTEE ON STATE HISTORIES OF EDUCATION

PRESIDENT F. C. ENSIGN, of the National Society of College Teachers of Education, has appointed a committee to examine and evaluate current state histories of education. A first duty of the committee will be to discover whether each and every state in the union has, in available form, a comprehensive, scholarly and up-to-date history of its educational development. In case the committee in its report to the February meeting of the society makes the disclosure that certain states have defective, or otherwise inadequate histories, a second duty will be to devise ways and means for securing the publication, whatever needed, of properly-prepared historical treatises.

Each of the state histories of education at present in circulation will be critically examined by some member of the committee to determine whether it provides a thorough, accurate and readable account. The committee has adopted a uniform set of criteria for evaluating the state histories.

The following professors of education, as members of the committee, assisted by a number of their colleagues in various institutions, will contribute to the report: Dr. Edward H. Reisner, Teachers College, Columbia University; Dr. Thomas Woody, University of Pennsylvania; Dean W. J. Gifford, State Normal College, Harrisonburg, Virginia; Dr. Edgar W. Knight, University of North Carolina; Dr. Frederick Eby, University of Texas; Dr. Harry Good, Ohio State University; Dr. George J. Jackson, University of Michigan; Dr. R. F. Seyboldt, University of Illinois; President Sheldon E. Davis, State Normal College, Dillon, Montana; Dean H. D. Sheldon, University of Oregon; Dr. John C. Almack, Stanford University; Dr. Zora Klain, Rutgers University; Stuart G. Noble, chairman, Tulane University.

TESTIMONIAL TO PRESIDENT ALDERMAN

ALUMNI of the University of Virginia plan to raise a fund towards the purchase of a gift for Dr. Edwin Anderson Alderman in commemoration of his quarter century of service as the university's first president.

Dr. Alderman assumed the duties of president of the University of Virginia on September 15, 1904, after having served as the administrative head of the University of North Carolina and of Tulane University. He will end his twenty-fifth academic year at the University of Virginia with the close of the final exercises on June 11, 1929.

The board of managers of the Alumni Association of the University voted at its November meeting, several weeks ago, to make a gift to

President Alderman next June and the first notice to the thousands of Virginia alumni was mailed on December 9.

The proposal for this testimonial was first made by McLane Tilton, alumni secretary. Expenses for carrying out the plan for solicitation of alumni have been underwritten by a gift from Gordon M. Buck, of New York City, a former president of the Alumni Association.

The letter being sent to all alumni reads:

The year 1929 marks the completion by Dr. E. A. Alderman of twenty-five years of continuous service as the university's first and only president.

It seems proper that such an event should be recognized by Virginia's alumni in the form of a substantial and fitting testimonial of appreciation of his devoted, distinguished and effective services to our Alma Mater.

While the board is certain that this movement, undertaken by them at the suggestion of numerous alumni, will meet with hearty and generous approval and support, they also feel that such a gift will carry to Dr. Alderman a deeper and broader expression of alumni affection for him rather than a large subscription from a few. The board has, therefore, decided to ask each alumnus to subscribe to the fund. Every dollar received will be applied to the gift as the alumni office is handling the matter and has already received a subscription made for the purpose of defraying all necessary expenses.

The form of the gift will depend upon the contributions received, but you may be assured that it will be one well becoming the occasion as well as of a character acceptable to Dr. Alderman.

EDUCATIONAL NOTES AND NEWS

DR. HERVIN U. ROOP, head of the department of psychology at Wheaton College, has been elected president of Lincoln Memorial University.

THE REVEREND G. MORRIS SMITH was installed as president of Susquehanna University, Selinsgrove, Penna., on November 23. Dr. Smith has served pastorates in Mt. Vernon, N. Y., and Buffalo, N. Y., and at one time was teacher in Blair Academy in New Jersey.

MISS E. ADELAIDE HAHN, of Hunter College, New York City, was elected president of the New York State Phi Beta Kappa Association at the recent meeting held in Buffalo. Other officers elected were Dean Edward Fitch, of Hamilton College, *vice-president;* H. B. Smart, of Cornell University, *treasurer,* and the Reverend Charles D. Broughton, *secretary.*

AFTER thirty-four years of service as a member of the Pennsylvania State College faculty, Dr. Fred Lewis Pattee, an authority on the history of American literature, has severed his connection with the college. He will spend the winter in Florida, writing and lecturing at Rollins College. In appreciation of the service of Dr. Pattee and as a token of their esteem, students on December 9 presented him with a gold watch and chain, suitably engraved. Having served for thirty-one years as superintendent of St. Paul's Methodist Episcopal Sunday-school of State College, Dr. Pattee also received an engrossed parchment from the school expressing its appreciation.

BISHOP FRANCIS J. MCCONNELL, of New York City, is chairman, and Dr. John Dewey, of Columbia University, first vice-chairman, of a committee of seventy organized to prevent propaganda in American schools on behalf of "special interests, groups and causes."

WARREN W. KNOX has been appointed to succeed Clarence E. Baer as New York State supervisor of science.

DR. RUTH WHEELER, professor of physiology and nutrition at Vassar College, has been appointed director of the Summer Institute of Euthenics at Vassar to succeed Professor Annie MacLeod, now dean of the college of home economics at Syracuse University.

IN the school of education of the North Dakota State College, Dr. Jesse A. Tanner takes the place of P. J. Iverson, professor of secondary education, who is on leave of absence. Dr. Tanner will supervise the work of the training school. In the department of physical education, C. C. Finnegan succeeds Ion Cortright as director.

AT the University of Texas, Professor H. J. Ettlinger has been appointed director of intercollegiate athletics for the year beginning December 1, 1928. The appointment is temporary, to meet an emergency. He will continue full work as professor of mathematics.

PAUL E. BARR has been appointed associate professor and acting head of the department of art in the school of education of the University of North Dakota.

ADRIAN O. MORSE, dean of men in the University of New Hampshire, has received a three-month appointment as secretary to Secretary of Agriculture W. M. Jardine. During his absence Dr. George N. Bauer, officer in charge of freshmen and a member of the faculty of the college of liberal arts, will serve as acting dean.

DR. W. L. CRUM, professor of statistics in the graduate school of business of Stanford University, has been elected editor of the *Review of Economic Statistics*, published by the Harvard Economic Society.

DR. H. H. TURNER, Savilian professor of astronomy at the University of Oxford, accompanied by Mrs. Turner, is coming to the United States in order to represent the British Association at the New York meeting of the American Association for the Advancement of Science. Dr. Turner will give a lecture on "The Scientific Retrospect."

PROFESSOR J. W. GARNER, of the University of Illinois, and Professor E. M. Patterson, of the University of Pennsylvania, have joined the faculty of the Institut Universitaire des Hautes Etudes Internationales at Geneva. Professor Garner is at the university at present, lecturing on American foreign policy and conducting a seminar class on "Nationality." Professor Patterson will take up his work at the beginning of the spring term. Both will remain for the summer session of 1929.

PROFESSOR GEORGE D. STRAYER and Professor N. L. Engelhardt, of Teachers College, Columbia University, assisted by several graduate students, have recently made reports of school surveys in Rye, N. Y., Greenville and Edgemont in Westchester County, N. Y., and Paducah, Ky.

PROFESSOR ALZADA COMSTOCK, of Mount Holyoke College, has been granted a semester's leave for the first half of 1928–29 for a study of land reform laws, which she will begin in Estonia.

IT is reported that Mrs. Yayoi Yoshioka, principal of the Woman's Medical College, Tokyo, who visited the United States after the close of the Pacific Women's Conference in Hawaii in August, has returned to Tokyo.

GEORGE MCANENY, president of the Municipal Art Society, Tony Sarg and Richard F. Bach, of the Metropolitan Museum, were the principal speakers at the eighteenth annual meeting of the School Art League, which was held in the Hotel Plaza on December 8. Dr. J. Herbert Low, principal of Erasmus Hall High School, acted as chairman. The alumni meeting followed a luncheon for three hundred guests in the grand ballroom of the Plaza.

THE REVEREND S. PARKES CADMAN will be the Selden Memorial Foundation speaker at the Connecticut College for Women, New London, next April.

DR. TRUMAN LEE KELLEY, professor of education and psychology at Stanford University, gave a course of public lectures, under the auspices of the graduate school and the department of psychology of the Ohio State University, beginning on December 3. The titles of the lectures were: "The Inter-relationship between Method of Research and Field of Investigation," "The Rôle of Judgment in 'Objective Measurement,'" "In What Units shall we Measure Intelligence and Achievement?", "Mental Structure and its Bearing upon Problems of Inheritance and Education," "The Mental Traits of Men of Science."

A MEMORIAL, probably in the form of an endowment for scholarships, will be established with funds from the estate of the late James A. O'Donnell, who, at the time of his death last summer, was principal of the Isaac Remesne Junior High School, New York City.

PRESIDENT ADA L. COMSTOCK, of Radcliffe College, on learning of the death of Alice M. Longfellow, daughter of the poet, Henry Wadsworth Longfellow, said: "Miss Longfellow was

not only a leader in the small group of men and women who founded Radcliffe College; she was also one of those who have brought it to maturity. For fifty years Radcliffe has had the benefit of her judgment, her interest and her generous sympathy. To lose her is a staggering blow; but the realization of her faith and her devotion will stay with us as a precious heritage."

DR. BASHFORD DEAN, honorary professor of zoology at Columbia University and of fine arts at New York University, honorary curator of fishes in the American Museum of Natural History, honorary curator of arms and armor in the Metropolitan Museum of Art and trustee of the museum, died suddenly in the Battle Creek Sanitarium on December 6, at the age of sixty-one years.

PROFESSOR GUSTAV GRUENER, of Yale University, a distinguished German scholar and one of the oldest members of the Yale faculty, died on December 5, at the age of sixty-five years.

PROFESSOR ROBERT MCLEAN CUMNOCK, founder of the school of speech at Northwestern University, died on November 28. In addition to teaching at Northwestern, Dr. Cumnock was also a professor at Garrett Biblical Institute, gave private lessons, and found time to give public readings two or three times a week.

CHARLES FRANCIS WHEELOCK, from 1910 to 1923 assistant commissioner of secondary education of New York State, died on November 4, in his eightieth year.

DR. ELBERT W. GRIFFITH, superintendent of schools in Glens Falls, New York, for twenty-seven years, has died from injuries received when he was struck by an automobile.

WILLIAM GRANT EGBERT, founder and for many years president of the Ithaca, New York, Conservatory of Music, has died at the age of fifty-nine years.

DR. ALEXANDER MAXIMOW, professor of anatomy in the University of Chicago, prior to the Russian revolution professor in St. Petersburg, died suddenly on December 3, at the age of fifty-four years.

THE Chicago board of education failed to meet its bi-weekly pay roll of $3,500,000 for 13,000 teachers on December 4. Neither was there any issuance of promissory notes or script or any assurance of when the salaries would be paid. As reported here last week, school authorities had expected to raise money for the pay roll by the sale of tax anticipation warrants. Leading bankers, however, declared that the collection of taxes was so uncertain this year they did not care to buy the tax anticipation warrants despite the high interest these short-time securities pay. When the bankers declined the securities nobody else cared to purchase them.

THE New Education Fellowship will hold an international conference at Elsinore, near Copenhagen, from August 8 to 21, 1929. The subject of discussion will be "The New Psychology and the Curriculum." The Castle of Kronborg, overlooking the sea (the scene of Shakespeare's "Hamlet") will be the headquarters of the conference, the speakers at which will include the following: Professor Cizek, of Vienna; Dr. W. Boyd, lecturer in education, University of Glasgow; Dr. Decroly, of Brussels; Dr. Adolphe Ferrière, of Geneva; Dr. P. Dengler, of Vienna; Dr. C. W. Kimmins, Dr. Percy Nunn, Miss Helen Parkhurst, Professor J. Piaget, Dr. O. Pfister, Dr. Harold Rugg, Mrs. Beatrice Ensor, Dr. Elizabeth Rotten, Rabindranath Tagore. Details can be had from the secretary, Miss D. Matthews, 11 Tavistock-square, London, W. C.

A CONFERENCE of rural school supervisors of the southern states will be held in the Hotel Roosevelt, New Orleans, on December 17 and 18. Participants will come from fourteen states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. They will include state and assistant state supervisors of rural schools and other members of state departments of education, county supervisors, county superintendents, professors of education in teacher-training institutions, officers of state education associations and the president of the National Congress of Parents and Teachers.

THE first building of the Yeshiva College in New York City was opened and dedicated on December 9. The ceremonies, at which Mayor

Walker was one of the speakers, were attended by 20,000 persons. The new building, erected at a cost of $2,500,000, will be ready for occupancy in January and will house the college until its building program is completed. The buildings will eventually occupy three blocks. Dr. Harry Fischel is acting president of the college, which is the outgrowth of a merger between the Rabbi Isaac Elchanan Theological Seminary and the Yeshiva College. In addition to Mayor Walker, the speakers included Judge Otto A. Rosalsky, Dr. Bernard Revel, president of the faculty; Dr. Frederick B. Robinson, president of the College of the City of New York; Samuel Levy, chairman of the college campaign committee which raised funds for the building, and Rabbi Simon Shkop, dean of the Talmudical Academy of Grodno.

CYRUS H. K. CURTIS has made a gift of ground valued at $250,000 to the Drexel Institute of Philadelphia.

THE University of Buffalo has received a gift of $100,000 for general endowment from Mr. and Mrs. Walter P. Cooke. The gift was made public simultaneously with the announcement of the beginning of a campaign by the university for a $5,000,000 fund, $1,500,000 to be used for buildings and $3,500,000 for endowment.

CORNELL COLLEGE, Mt. Vernon, Iowa, has raised $1,016,000 in its campaign for $1,100,000.

TWO anonymous alumni have contributed $25,000 to Lafayette College. One gift is for the endowment of the college infirmary, the other is the first contribution to the project for new dormitories. In addition to these gifts there have been received in the last two wteks $40,000 from three givers for a new college heating plant.

AN appropriation by the Carnegie Corporation of New York of $200,000 to be applied toward the construction of an office building to cost $1,000,000, for the use of the Pan-American Union, was announced on December 5, at the meeting of the governing board of the union, composed of the diplomatic representatives of the Latin-American republics at Washington and the Secretary of State. The new structure will be situated on a triangular plot of ground in the rear of the present Pan-American Union building.

THE Imperial University Library in Tokyo built by a gift of four million yen from Mr. John D. Rockefeller, Jr., has been formally dedicated, the American and British ambassadors and the minister of education participating. The building replaces that destroyed in the 1923 earthquake. It contains 600,000 volumes, largely gifts from America and Great Britain.

THE University of Cambridge has been offered £50,000 by the British Exchequer and a further £50,000 from the Empire Marketing Board toward the sum required to enable the university to accept the conditional grant of £700,000 from the Rockefeller Foundation, to provide new facilities for the study of agriculture, biology and physics, and to build a new university library.

DEAN PAUL CLOKE, of the College of Technology of the University of Maine, announces that honors groups are to be started in the departments of civil engineering and electrical engineering. Only exceptional students, selected on the basis of scholarship and promise of achievement, will be admitted to the groups. The establishment of honors groups was suggested about a year ago by Professor Embert H. Sprague, of the department of civil engineering, and follows a conference recently held at Swarthmore College by President Harold S. Boardman and Dean Paul Cloke with President Frank Aydelotte. It is expected that honors groups will be organized in other departments of the university.

IT is reported from Washington that the Civil Service Commission is perfecting an arrangement for personal contact with colleges and universities to meet the competition of private industry for the services of new graduates from technical and scientific courses. Many of the larger private employers send their agents to educational institutions each year to recruit new workers from the graduating classes. Under the plan of the Civil Service Commission such recruiting for the government will be undertaken by employees of the technical and scientific bureaus who find it necessary to visit the educational institutions from time to time for conference and research. The federal civil ser-

vice employs nearly 3,500 engineers of various kinds, more than 1,000 chemists and large numbers of other technical and scientific workers. The junior technical and professional workers enter the government service at $2,000 a year. The highest salary paid is $9,000.

SPECIAL CORRESPONDENCE

THE NEW TURKISH ALPHABET

ONE of the most daring and far-reaching reforms in recent educational history was written into the law books of Turkey when the Grand National Assembly, as one of its first acts after reassembling, gave formal approval to the adoption of the "New Turkish Alphabet." This is no less than the adoption of a phonetic system of writing, with letters of Latin origin, for the Turkish language, which for centuries has been written in the flowing Arabic letters. Omitting three of the English letters, "q," "w" and "x," and adding a few diacritical marks, familiar to Europeans, such as the cedilla, which is added to both "c" and "s," the new alphabet is able phonetically to express all the sounds in the attractive Turkish language. Indeed, it is a much more adequate system than the now discarded Arabic, for Turkish contains several sounds not used in Arabic, so that one Arabic letter was called on to express two or more Turkish sounds.

The new reform has its foundations in the freer spirit of the early twentieth century when savants discussed the possibility of adopting Latin characters, just as similar proposals have from time to time been put forward for the writing of Japanese and other oriental languages in Latin letters. With the coming of the Nationalist movement, with its frank adoption of many Western ideas and ideals, the agitation was renewed, and at length a government commission was appointed to study the matter. But this commission might have come to naught as so many commissions east and west have often done, had it not been for the energy and the enthusiasm of that remarkable leader of modern Turkey, Mustafa Kemal Pasha, the president, known generally as "the Ghazi," the victorious one. He threw the weight of his tremendous personal and official prestige in favor of the reform, with the result that months before the National Assembly could meet and pass the law, it was officially approved and plans made for its early introduction. In June the western form of the numerals, which, strangely enough, were always written left to right as in the West, came into force. Next officials began generally to write their signatures in the new letters. Busy committees drew up rules and regulations, busy presses poured out text-books, teachers in all the government schools were advised to learn the new system and had to pass examinations before they could resume their work, and throughout the country the date for opening schools was delayed to allow all to be ready. With the fall term of 1928, all education was to be in the new characters. In the summer papers began to appear with some parts printed in the new form, though the bulk of the material continued to appear in the Arabic.

By the new law the new forms are fully approved and correspondence written thus is to be given full credence. After December 1, all newspapers, magazines, etc., are to be printed only in the new letters, as are the titles of cinemas, handbills, etc. By January all the government departments are to do writing in the new alphabet, save only the courts and the military, which are allowed till June 1, 1929, to complete the change.

The educational possibilities of this reform are most important. It is estimated that the time required for children to learn to read and write will be greatly reduced. But more important than this is the determination of the government, by means of popular courses throughout the entire country, arranged at the slack times in each district, to teach every one to read and write. The president and other leaders are urging the learning, and on those who know it, the teaching, of the new alphabet as a national duty.

Another important by-product of the present change is the help it is giving toward the simplification of the Turkish language. Owing to the influence of Arabic and Persian culture, many Arabic and Persian words have been

taken into Turkish, and even where equivalent Turkish words were available, the Arabic and Persian forms were regarded as more elegant, and were used by the educated and cultured classes to such an extent that persons perfectly familiar with ordinary conversational Turkish found themselves lost in reading official communications or listening to formal addresses. The new government is strengthening the movement for a simplification along two lines: one the elimination wherever possible of the foreign words in favor of the simpler Turkish words, and where this is inconvenient, the Turkification of the foreign forms, so that their declension and conjugation will follow Turkish rather than the less familiar foreign forms.

The reform has already attained a surprising success. Everybody who knew how to read and write in Arabic characters has set himself to learn the new forms, while many illiterates have been encouraged to learn to read and write. With the early appearance of newspapers, books and correspondence generally in the new letters, a great impetus will be given, to the extent of making its use compulsory.

CASS ARTHUR REED
INTERNATIONAL COLLEGE,
SMYRNA, TURKEY, Nov. 10, 1928

DISCUSSION

THE RELATIONSHIP BETWEEN STUDENTS' MARKS AND STUDENT ATTITUDE TOWARD INSTRUCTORS.

Do college marks form any sort of index to the attitudes of the recipients of these marks toward the instructor? Do students tend to like an instructor from whom they receive good marks and to dislike the one from whom they receive poor marks? Are there any measurable individual differences among instructors in this regard, *i.e.*, do some instructors tend to be liked or disliked in relation to the kind of marks they give, while others do not?

These questions, apart from mere curiosity which most instructors would have with reference to answers to them, have, of course, definitely practical bearings upon the student-instructor relationship and therefore upon the classroom teaching situation and its results. Should it be true that the average student tends to have his attitudes toward instructors influenced by the marks he receives, this would constitute an important psychological fact to be kept in mind by the instructor and possibly also by the student.

Answers to these questions of the opinion variety are easily available. Without any quantitative data to submit in support of this observation, it is my judgment that most instructors believe that students do tend to regard teachers as either better or worse teachers, depending upon the marks assigned to the students, other things being at all equal. The issue is, however, important enough to warrant a more careful and analytical approach to the problem, and it was therefore decided to investigate it by means of an instrument[1] available for the purpose. For the purpose of the present study it will be sufficient to state that the student rates the instructor—anonymously—by means of a graphic rating scale on the following ten traits:

(1) Interest in Subject.
(2) Sympathetic Attitude toward Students.
(3) Fairness in Grading.
(4) Liberal and Progressive Attitude.
(5) Presentation of Subject-Matter.
(6) Sense of Proportion and Humor.
(7) Self-reliance and Confidence.
(8) Personal Peculiarities.
(9) Personal Appearance.
(10) Stimulating Intellectual Curiosity.

Ratings of eleven instructors—seven Purdue University seniors who had just completed their practice teaching in local high schools and four college instructors—were obtained from 409 students in seventeen different classes. Seven

[1] The Purdue Rating Scale for Instructors. The Lafayette Printing Company, Lafayette, Ind. For a description and experimental data concerning the scale see G. C. Brandenburg and H. H. Remmers, "A Rating Scale for Instructors," *Educ. Admin. and Superv.*, September, 1927, and H. H. Remmers and G. C. Brandenburg, "Experimental Data on the Purdue Rating Scale for Instructors," *ibid.*, November, 1927.

of these classes were composed of high-school pupils and ten were students at Purdue University. Thus 409 judgments were obtained on each trait, making a total of 4,090 judgments.

In order to make possible a study of the relationship between students' marks and their ratings of instructors, the students who were above the average of the class relative to marks were asked to mark a cross on their papers, their names being read off by the instructor immediately after the ratings were completed. This procedure retained the anonymity of the ratings and avoided invalidation of the ratings which might have resulted from any foreknowledge of the purpose of the ratings. So far as the students were aware, they were simply rating the instructor under ordinary conditions.

The results, when tabulated and statistically treated, provide answers to the questions propounded at the beginning of this paper. It will be sufficient here, without going into the technical details of the statistical treatment, to give the interpretations made of the results.

It appears, first, that there is no noticeable tendency for students to vary their ratings of an instructor with the kind of marks which they receive from the instructor. The average correlation between ratings and marks for all traits is .070—practically zero. The rather prevalent notion that students tend to like the instructors from whom they receive high marks and to dislike those from whom they receive low marks is not substantiated in so far as the average ratings on the Purdue Rating Scale for Instructors give a measure of such likes and dislikes for these students and instructors, who are typical students and instructors of the kind described.

There do appear to be, secondly, tendencies toward individual differences among instructors. While for the average instructor the correlation between marks and students' ratings is practically negligible as determined from 187 correlations (one for each of the ten traits for seventeen different classes and one for each averaged rating) some instructors show a positive correlation for all or most of the ten traits while *others yielded consistently negative correlations.* These latter apparently have the happy faculty of "flunking them and making them like it." The highest positive correlation for any single trait was +.890; the highest negative correlation, −.860. When all the traits were averaged for each instructor, the highest positive correlation for a given instructor was +.317, the highest negative correlation, −.142.

Thirdly, there is no appreciable tendency for students to vary their ratings for any single trait for *all* instructors. The extreme variations of average correlations here are represented by "Presentation of Subject-Matter" (−.066) and "Liberal and Progressive Attitude" (+.144). It has been shown elsewhere[2] that there is very little tendency for students to take a "generalized" attitude toward their instructors. They do discriminate among the various traits for a given instructor, as shown by the relative absence of intercorrelation among the ten traits of the Purdue Rating Scale for Instructors. These facts taken together would seem to indicate that in the students' judgment each individual trait adds something to the total picture of the instructor and no one particular trait bears any more significant relationship to scholastic performance than any other. It is, of course, quite possible and certainly consonant with "common sense" that an instructor may be so outstanding in some desirable traits that deficiencies in others are adequately compensated for. The main point, however, is that on the average there is no appreciable relation between marks and ratings.

H. H. REMMERS

PURDUE UNIVERSITY

DO CHILDREN APPRECIATE EYE STRAIN?

IT is a well-nigh universal recommendation that children should read at fourteen inches or the metrical equivalent of thirty-five centimeters, as it appears in European books. The school law of Massachusetts directs the teacher to send "notice card" when a child shows symptoms of defective eyes, including the holding of his book at less than twelve inches. For decades writers have gone on putting this recommendation into their books, apparently thinking that most chil-

[2] J. M. Stalnaker and H. H. Remmers, "Can Students Discriminate Traits Associated with Success in Teaching?" to be published in an early number of the *Journal of Applied Psychology.*

dren read at fourteen inches or can by suggestion be brought to read at that distance.

In actual practice children read at much less than fourteen inches. I have found that when children start in school they hold their books at the same distance as they hold other objects for close examination. This distance is short, obviously because the child is small. As he grows he holds objects, including his book, farther away until at adolescence he reaches mature size, and his reading distance remains stationary.

When a six-year-old child reads at his normal distance of seven or eight inches he is using more of his accommodation than a sixteen-year-old child uses when he reads at his normal distance of approximately fourteen inches, because the six-year-old child has very little more accommodation than the sixteen-year-old child. I have already offered evidence on this point in SCHOOL AND SOCIETY of April 7, 1928, page 428, and consider it one argument that children are not very sensitive to tensions of accommodation and convergence.

A second argument involves the question of whether hyperopic children read at the same distance as normal children. From what I can gather from the literature, it is a rather common belief that hyperopic children make some allowance for their hyperopia by holding their books farther than normal from their eyes. This view can be questioned on the ground that the normal reading distance of children has apparently not previously been known. The average reading distance of children varies so definitely with age, or some factor closely correlated with age, such as physical growth, that a table such as the following would be needed before it could be said that hyperopic children make any allowance in their reading distance for their hyperopia. The following table is typical and shows how reading distance increases with age. It represents three hundred cases distributed quite evenly over the different ages. These children were measured away from school, each child by himself. Under such circumstances children seem to hold their books a trifle nearer than in the day's work at school. Several measurements were taken of each child.

Years	Inches
6	6.8
7	7.5
8	8.5
9	8.8
10	9.6
11	10.2
12	11.0
13	11.6

I have had the opportunity of measuring the reading distance of a few children of different degrees of hyperopia, and though the cases are too few for generalization, they show no tendency to hold the book farther than the average for their respective ages. An observation made by an English doctor while conducting a school examination has a possible bearing on this point. In his report in *Lancet*,[1] he says:

> It was noticed that three children, about eight years of age, were sitting at a desk. . . . These children were stooping over their books writing, their eyes two and one half inches or so from the books. One of these children I found to be suffering from a high degree of myopia; the other two children were probably unconsciously copying the example of the elder myopic child.

If children would thus use all their accommodation apparently in imitating another child, it seems not improbable that hyperopic children would use most of their accommodation, if necessary, to imitate the postures of their classmates.

From my study of reading distance, I have come to the conclusion that the reading distance of children is determined more by imitation than by any other factor. Another factor of lesser influence seems to be the amount of mental effort the child is putting forth. If it should be found that hyperopic children read at the same average distance as children with normal refraction, it would be more evidence that imitation or physical growth determines reading distance. At any rate, the old standard of fourteen inches is fictitious when applied to children, and in its stead might as well be substituted the fact that children have normal age standards. As to whether children should use a greater distance and thereby use less accommodation is another matter.

E. B. NOTSON

SMITHTON, MO.

[1] September 19, 1908, p. 903.

QUOTATIONS

THE RHODES FELLOWSHIPS

OFTEN throughout the year the people of the United States are reminded of the Rhodes fellowships at Oxford by events in the news. At this season particularly, when Dr. Aydelotte, American secretary to the Rhodes trustees, announces the names of American youths who are going to Oxford under the plan, the subject holds much interest. Almost as many candidates as last year competed in the trials, and now thirty-two fellows from as many states are to continue the contact which Cecil Rhodes hoped would produce an English-speaking imperial leader of unprecedented equipment and training.

Rhodes was an enthusiast who believed that Great Britain, the United States and the British colonies and possessions would eventually make common cause, and it was unquestionably his belief that the fellowship idea would help to evolve leaders for his dream. He was inclined, late in his life, to admit the Teutons—the Latins never—as worthy partners in the sodality of nations—a fraternal impulse which the World War temporarily set aside. Too practical to be certain of, and yet visionary enough to expect, the development at Oxford of a super-Amero-Anglian, the Rhodes exchange plan has been in force for over twenty years without the appearance of any prodigy of statecraft. Because of his continued absence, there has occasionally arisen some criticism of the Rhodes "scholar" system. In our own country it has now and then been remarked that no Rhodes man has turned up very often in the light of dazzling fame or with the credit of distinguished achievement. In England the comment has been heard that the students, who in 1904 were too often "moral" leaders in such movements as anti-rum and anti-cigarette clubs, are now too consistently recruited from the ranks of athletes who have harmed Oxford athletics by exhibiting skill which keeps the English undergraduates from trying for track team or crew. In more remote circles in both countries it has occasionally been said that the Rhodesians at Oxford from America were inclined to "colonize" themselves and did not move enough among the English student groups.

The answer to the charge that Rhodes men remain as a group obscure in American life seems conclusive; the oldest of them are barely 40 and just entering their zone of high achievement, while those who have made important progress have turned to the cloistered occupations of scholarship, economics, government service and the law. Their percentage of emergence in the trade which familiarizes names only a little less easily than public life—creative fiction—is high, with Christopher Morley and Elmer Davis springing quickly to mind. The accusation that the students too often are athletes need hardly be answered. In fact the most ponderable criticism of the workings of the plan is questioning the requirement that the students be chosen by states, as if they were senators, with New York, for example, being entitled to no more places than Arizona. Now parliament is being asked to change the selective arrangement and divide this country into districts. That may improve the quality of the educational exiles. But even as things stand they are making their mark in this country, and their turn toward public life is not yet overdue. —*New York Times.*

THE EDUCATIONAL DAWN IN THE EAST

LET those who think they live in the most progressive nations in the West stop for a moment and pay respects to reawakening nations in the East. It is a fact that the United States gives more time and money to schooling than any other country. One third of its entire population is giving full time to the business of education. England continues to be such a seat of learning that scholars from every point of the earth make pilgrimages thereto in increasing number. But there is honor in the East. China, with something like 90 per cent. of its 365,000,000 people illiterate, has set out to teach a simplified Chinese language to every one, young and old, rich and poor, and in an exceedingly short space of time. China's greatest revolution is her educational revolution.

India with her noble cultures undimmed through thousands of years moves on an extensive scale to adapt these cultures to modern requirements. Turkey boldly sets aside her written language, centuries old, and adopts overnight the plain A B C—throughout the whole gamut of her social and economic life. Japan,

which until a few decades ago took note of little beyond her own borders, has not only undertaken to educate herself with a zeal unexcelled by any other land, but has applied wholesale, yet intelligently, a new educational method which the United States has little more than begun to put into practice.

China's political revolutions are only instrumental or incidental to the remarkable educational movement now spreading rapidly over the country. For the present it is almost altogether a matter of language. Countless dialects which have caused the Chinese to be foreigners within their own land, if they but went so far as fifty miles from their own home community, are being systematically displaced by that dialect which is already spoken by the greatest number.

One national tongue is the goal. Instead of allowing a written language of thousands of cumbersome characters to persist, a courageous reduction has been accomplished. And in order that Chinese anywhere in China proper may write to one another, and be understood, a dictionary of 1,000 words has been published. Every man, woman and child is asked to learn this vocabulary. Everybody is at it. Regular schools, special schools, lecturers, stereopticon lessons, all possible means are used. Every one who writes for the press, the magazines or books is requested to keep within the 1,000-word vocabulary. The greatest business of all, according to Dr. William Hung, visiting professor at Harvard University, is to find the kind of ideas to put into all this printed material that will help the Chinese people to begin to think along those lines which will propel them toward civic and spiritual growth, as individuals and as a nation.—*The Christian Science Monitor.*

BOOKS AND LITERATURE

School and Society in Chicago, by GEORGE S. COUNTS, Professor of Education in Teachers College of Columbia University. Harcourt, Brace & Company. 1928. 367 pp.

FROM the standpoint of the popular appeal of its subject-matter or its charm of style, a school survey or the conventional book on education affords little ground for a place among such best sellers as lively stories of philosophy or microbe hunters. It is true that the author of a recent work on education advanced the claim that his book differed from all other educational books in that it was interesting. The present reader would reserve this place for "School and Society in Chicago."

The battle of the history books under the standard of 100 per cent. Americanism did not have the international significance attached to it by many of the subjects of King George, but it has great significance for all who are interested in the integrity of American schools. It is the purpose of the book to penetrate the "smoke screen" so artfully raised by the belligerent Mayor Thompson and to reveal the conflicting groups and interests that were engaged in a real battle for the control of the schools of Chicago.

The first chapter, "The Triumph of the Politicians," opens with the suspension of Superintendent McAndrew, and describes the progress of the mock trial. King George was not the real issue. Educational policies are seldom considered solely on their merits. The Chicago spectacle is studied from the point of view of a survey of the social medium in which the schools of our great cities must function.

In "The Growth of a City" is pictured the aggregation of groups of nationalities, religious and other conflicting interests, with the schools, offering an irresistible temptation to all types of profiteers and patrioteers. It is proposed to discuss, first, the conflict of interests within the school organization, and second, the outside forces which condition school administration.

Neither the earlier school laws nor the later provisions of 1917 succeeded in divorcing the schools from politics or in defining the limits of authority. "Responsibility is shared by the state legislature, the mayor, the city council, the board of education, the superintendent of schools, the business manager, the attorney and the teaching staff. So the law makes fairly certain that clash of authority which perpetually attends the administration of public education in Chicago." Between the board and the superintendent and teachers there has been

constant strife and suspicion. The relations between the superintendent and teachers are largely determined by teachers' organizations and the attitude of the superintendent towards them. The Teachers' Federation, under the leadership of Miss Margaret Haley, had successfully appealed to the legislature on pensions, salaries and tenure of office, and had made itself a factor in school policy. This and other teachers' organizations became antagonistic to Superintendent McAndrew when their attempts to participate in the formulation of the new program were rejected, and this antagonism became pronounced when the Teachers' Council was abolished. The council had been fostered and utilized by Mrs. Ella Flagg Young and other superintendents, and had been given legal status by the Board of Education. It is no light matter for a superintendent to ignore the influence of his predecessors and the attitude of his teachers. The teachers supported Mayor Thompson on account of their own grievances, not on account of the tyranny of King George.

In addition to the internal conflicts the educational system "is perpetually pushed and pulled and molded by a vast array f external forces." Of these, the most powerful are selected for description as typical of the interests of finance, labor, women, churches, the press and politics.

The Association of Commerce antagonized labor through its advocacy of the Cooley bill, which aimed at establishing a separate system of vocational schools. It has sponsored in the schools a plan of vocational guidance, safety education, "sound" civics, efficiency in the "three R's," industrial art and civic-industrial clubs in high schools. It has consistently cooperated with other "best elements" to influence educational policies and programs. Superintendent McAndrew's close relation with the Association of Commerce and his request for them to make an "appraisal of schools" led to strong opposition from other quarters.

The Federation of Labor opposed the Cooley bill as an attempt to bring in a caste system of education. It joined issue with Superintendent McAndrew on the junior high school, the platoon system and the intelligence test. It regarded the superintendent as the tool of the vested interests.

The educational program of the women's clubs is extensive, and their accomplishments enviable. Their projects include kindergartens, compulsory education, vacation schools, social centers, penny lunches and the merit system. Their attitude toward the policies of Superintendent McAndrew was generally favorable.

As to the churches—"One comes away from a study of the influence of the religious factor in the conduct of the public schools of Chicago with a certain feeling of despair," and yet, "That any religious group in Chicago has far-reaching designs on the educational system of that city is highly improbable."

The influence of politics in the Chicago school system has been notorious. The power of city hall was challenged by Superintendent McAndrew upon his arrival in Chicago. By appointments and removals, frequently illegal, successive mayors had directly dictated the policy of the Board of Education. During the two earlier terms of Mayor Thompson there is a picture of two contending boards, of a superintendent illegally locked out of his office, of board members serving jail sentences, of an orgy of graft connected with school sites and supplies. The scandal aroused general indignation and resulted in the election of Mayor Dever. But the public has a short memory. The schools that had been rescued from corruption were now to be rescued from King George. Labor and teachers were already in opposition to the superintendent, and various other groups were about to be won over by lurid appeals to racial and national prejudices.

The concluding chapter, "The Riddle of Control," discusses the conflicting interests involved and various proposals for solution. The separation of the schools from city hall by the election of board members at large, the enlarging of the power of the superintendent, might to some extent simplify the problem, but would not eliminate the conflicting play of social forces. Politics, in the broader sense, can not be kept out of the schools. "Therefore, rather than seek refuge in the cautious course of removing the school from politics, we should move forward under the assumption that the real

business of politics is to provide the channels through which the living energies of society may flow into new forms and patterns." Boards of education may be more truly representative by the direct recognition of various groups. Some form of organization of the entire body of teachers is necessary for the due evolution of policies and programs and professional responsibility.

The value of this survey of school and society in Chicago lies not in offering a program, but in demonstrating the fact that in the formulation of school policy more attention must be paid to the social influences by which it may be aided or wrecked. In addition to a survey of plant and equipment, of organization and efficiency, there will be surveys of how the schools have functioned in the community and of the attitudes of the teaching staff and the various social groups.

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EDUCATIONAL RESEARCH AND STATISTICS

A PROJECT IN STUDENT PERSONNEL SERVICE AT THE COLLEGE LEVEL

THE purpose of this paper is to present the results of a project in student personnel service in a small college. In brief, the theory underlying the project is this: *Each student should achieve at the level of his ability.* In practice this theory turns the attention of the administrator to the *student as achieving,* or failing to achieve, rather than to the *grades which are achieved.* It gives the grades, on any unit scale, meaning in relationship to the individual student as well as in relationship to a definite standard of scholarship. Grades, having this dual reference, furnish a basis for expert advisement.

It is proposed as a just and defensible thesis that every student who enters college should be there with a serious purpose; that he may be expected to achieve up to the level of his ability; that to expect more is to require the impossible of the student, and to permit less is to brand the administration as myopic and inefficient.

Believing in this thesis, and with the cooperation of students and faculty at Graceland College, the writer has reduced it from hypothesis to practice. The project was possible only with the heartiest support of the entire institution, of which the writer was serving his fourth year as dean of student personnel. Graceland College is a junior college, located at Lamoni, Iowa. Its enrolment is about two hundred and fifty students per year. The same project undertaken in a large college or university would meet the complexities of administration incident to the larger institution.[1]

In the fall of 1927, the faculty of the college was called together two days in advance of freshman registration for committee meetings and round table discussions. In all, four discussion periods were held. The topics discussed were: (1) The responsibility of the college to the students and their homes; (2) the personnel bureau and its services; (3) the aims, tasks, personality and technique of the teacher; (4) objective testing and grade computation.

As an outgrowth of these pre-registration meetings, the faculty took as its slogan "Help each student achieve at the level of his ability." In order to remove this slogan from the realm of sentimental well-wishing and blind strivings the two variables of the slogan were defined. The "level of ability" of each student was determined by his T-Score upon a composite raw score of seven tests given to the freshmen during the early weeks of the school year. The tests used were:

1. Iowa Placement Examination: Mathematics Aptitude, Series M. A. 1 Revised, A.
2. Iowa Placement Examination: Mathematics Training, Series M. T. 1 Revised, A.
3. Iowa Placement Examination: English Aptitude, Series E. A. 1 Revised, A.
4. Iowa Placement Examination: English Training, Series E. T. 1 Revised, A.
5. Iowa Comprehension Test, Series D-1.

[1] The writer is indebted to Dean C. E. Seashore and Professor George D. Stoddard, of the State University of Iowa, both of whom had an active interest in the project.

6. Iowa High School Content Examination.
7. American Council of Education Psychological Examination, 1927 edition.

These seven tests contained a total of 841 items, requiring five hours and eighteen minutes of working time. They are diagnostic of the basic abilities which contribute to college success. They test the student's aptitude and previous training in two of the fundamental courses in college—English and mathematics. They test a fundamental tool subject of the student—his ability to read. They test the educational foundation for college work—knowledge of high-school subjects. Finally, they test the prime requisite for scholastic success—mental ability. One hundred twelve freshmen took these tests. Table I summarizes the data covering the significant group tendencies.

TABLE I

	M.A. 1	M.T. 1	E.A. 1	E.T. 1	D–1	H.S.C.	Psy.	Comp.
Mean	18.11	23.19	36.65	88.32	19.8	109.37	106.5	400
S. D.	10.44	10.68	9.69	35.91	7.86	35.46	41.8	123.2
P. E.	7.94	7.20	6.52	24.22	5.3	23.90	28.23	83.0
Range	1–56	4–48	12–61	8–171	6–38	34–209	25–228	135–776

The raw scores for each student on both the composite and separate tests were converted into a type of "T-Scores" by using this formula: $T\text{-}Score = 50 + \frac{10(X-M)}{P.E.}$. X represents any raw score on a test; M, the mean for that test; $P.E.$, the probable error; 10, an arbitrary constant to eliminate decimals, and 50, an arbitrary number to place all the means at 50. This formula reduced all the scores to a comparable scale with the mean for each at 50 and with five probable error deviations each way from the mean. With the scores thus reduced to a comparable scale a diagnostic chart was devised and each student's scores were graphed on an individual chart. This level of ability as determined by the composite score on the seven tests was called the student's "expectancy" level.

The student's "achievement" was defined as his grade point average on the quarterly and semester grade reports from his classes. These scores were also converted to T-Scores and scaled in a column opposite the expectancy level. Each quarter as the grades came in they were converted to T-Scores and scaled on the student's diagnostic chart. The students were then classified in five groups representative of their achievement in ratio to expectancy:

A: Those achieving at 2½ P.E.'s or more above expectancy.
B: Those achieving from 1 to 2½ P.E.'s above expectancy.
C: Those achieving within 1 P.E. of expectancy.
D: Those achieving from 1 to 2½ P.E.'s below expectancy.
E: Those achieving more than 2½ P.E.'s below expectancy.

Students in Class C were considered as doing satisfactory work—all that could be justly required. Students in Classes A and B were considered unusually successful—doing more than expected. Students in Classes D and E were considered unsuccessful—not doing as much as could be justly expected. Remedial procedures concentrated upon the two latter groups, in an attempt to bring them up to expectancy, while constructive personnel measures were used with all to keep them achieving at their levels of ability.

No small part of the project undertaken at Graceland College lies in its personnel service bureau. Graceland is a small college. The student personnel service bureau here outlined was devised to meet its needs. The organization is simple, the functions diversified. Responsibility was both centralized and distributed. The writer was responsible for organizing the bureau, inaugurating the personnel program and for many of the technical phases such as the testing program, personal interviews, counseling, correspondence with parents, teaching the class on study methods, diagnosing difficul-

ties, prescribing remedies and ironing out most of the serious difficulties of the students. Different members of the faculty, many of them experts in the field, coordinating their work with that of the central office, were responsible for student employment, literary societies, intramural contests, music, athletics, dramatics, religion, budgeting of time and supervision of health.

The following list outlines briefly the essential personnel services developed at Graceland:

(1) *Faculty cooperation:* Student personnel service is at its best when, and only when, it enlists the hearty, unstinted and intelligent cooperation of all the faculty. At Graceland College a high degree of cooperation has been reached. The administrators, the faculty, the students and the parents have so interwoven their efforts that a school spirit both joyous and efficient has been developed.

(2) *Freshman days:* At the opening of the school year a program of freshman days was arranged, which brought the freshmen to the campus two days in advance of the upperclassmen. During these two days the students were registered; had their entrance examinations and physical examinations, and were inducted into the ideals and spirit of the school, all under the guidance of and in contact with the faculty and the officers of the student organizations.

(3) *A Class in Methods for Freshman Students:* This class, entitled "The Business of Being a College Student," was conducted by the writer and attended by all freshmen. It met one hour each week and dealt with the essential problems incident to student success in college. "Methods of Study," by C. C. Crawford, was used as a text.

(4) *Letters to Parents:* To enlist the support of the parents a program of correspondence was carried out. Personal letters were sent to the parents of each student at the following times: immediately following his enrolment; at the end of the first nine weeks, enclosing grades and commenting upon the student's success; at the end of the first semester, and on occasion in accordance with special needs of individuals.

(5) *Student Interviews:* To establish close cooperation with and an understanding of each student, a series of personal interviews was held. These consisted of a "get-acquainted" interview with each freshman at the beginning of the school year; interviews with students scholastically below their expectancy level, and interviews of a special nature dealing with moral problems, philosophical disturbances and general problems of individual adjustment.

(6) *Time Budgets:* During freshman week, in the class for freshmen and in personal interviews, methods of budgeting time were discussed. A large percentage of the students developed the habit of scheduling and conserving their time, and at one time or another during the year each student made out a written schedule for his time.

(7) *Class Attendance and Absences:* Daily records of class attendance were filed in the writer's office. Negligence in class attendance was quickly detected and remedial means provided. "Being there" is one of the best methods of making a good record in a given class.

(8) *Rooming Quarters:* Practically all the students roomed in dormitories under college supervision or in their own homes in town. Quiet hours for study and rest were scheduled and well observed. The rooming quarters were supervised by resident members of the faculty in most instances. An atmosphere of homelikeness and studiousness prevailed in these quarters.

(9) *Health Supervision:* All students were given a physical examination during freshman days; courses in physical training were required, and an active program of intramural contests was sponsored. All these contributed constructively to the health of the students. A resident nurse and a college physician were maintained to detect and care for those who were sick.

(10) *Extra-curricular Activities:* A rich program of literary, religious, athletic, musical, dramatic and forensic activities was provided through the student organizations and the varsity activities. Every student participated in some form of extra-curricular activity.

(11) *Student Difficulties:* Student difficulties are multiform and numerous. These were adjusted through the central personnel office, relying largely upon the diagnostic chart and the personal interviews, and using the available

channels of college activities for remedying them.

The above outline is too sketchy to give an adequate picture of the personnel services but indicates briefly the many avenues through which the student is known and provisions made for his growth.

The results of the project show many advantages to both students and administrators. Some of the most important ones are listed below:

(1) From 77 per cent. to 81 per cent. of the students achieved at or above their level of expectancy throughout the year as measured by the standard adopted for this project. Table II shows the numerical, quantitative results independent of the qualitative ranking of the student.

TABLE II

Showing the Number of Students Falling in Each of the Five Classes for Each of the Four Quarters of the College Year 1927–28. Freshman Class of 112 Students

Quarter	Class A	Class B	Class C	Class D	Class E	Total
1st	1	31	58	17	5	112
2nd	2	22	61	21	2	108
3rd	1	26	50	22	4	103
4th	3	23	50	21	2	99

(2) Sixty per cent. of the students below the level required for graduation were achieving at or above their levels of expectancy. By use of the diagnostic chart, the advisers' time, ordinarily given indiscriminately to students low scholastically, could be given more helpfully to the forty per cent. whose expectancy level indicated that they should have been above the graduation dead line, but were not. Table III summarizes these facts.

(3) The 60 per cent. of the advisers' time ordinarily misdirected was applied to students who ordinarily are neglected, since their grades are above the academic danger line, but who are actually far below their own level of expectancy. An analysis of individual charts showed eight individuals for each of the first three quarters and five for the fourth who had grades above the *average* of the freshman class, yet far enough below their own expectancies to be classed D and E. These received counsel and assistance and profited by it.

TABLE III

Showing the Number of Students Below Graduation Level; the Number and Percentage of these in Class C; Above Class C; and below Class C; for Each of the Four Quarters of the Year

Quarter	Number below graduation level	In Class C		Above Class C		Below Class C	
		No.	Per cent.	No.	Per cent.	No.	Per cent.
1st	30	18	60	0	0	12	40
2nd	24	13	54	2	8	9	38
3rd	25	12	48	3	12	10	40
4th	13	7	54	0	0	6	46

(4) Students below expectancy for a given quarter showed marked gains in the succeeding quarters. Ability to detect those who were below their levels of ability gave directness to remedial procedures with fruitful gains. Sixteen students counseled at the end of the first quarter showed an average improvement of seven points on the T-Scale of achievement.

(5) Where gains were not registered in the succeeding quarters and students remained below expectancy, the reasons were ascertained. In some of these cases the causes could not be removed. They consisted of such factors as being required to work long hours for room and board, illness or the lack of the power of self-direction. This latter factor requires several semesters of practice to show improvement.

(6) The methods used in carrying out the project created a general interest in scholarship, on the part of students, comparable to their interest in other supervised activities. It gave each student a goal as stimulating as those of athletics, music or forensics.

(7) It enabled the administration to deal with the problem student more wisely and with a greater degree of accuracy and expertness.

(8) It focused the attention of the faculty and administration upon the *student as an individual* rather than upon the *average tendencies of students as a mass.*

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